

JPRS 71815

6 September 1978

WORLD EPIDEMIOLOGY REVIEW  
No. 104

WORLD

WIDE

**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
Distribution Unlimited

20000412 164

U. S. JOINT PUBLICATIONS RESEARCH SERVICE

Reproduced From  
Best Available Copy

#### NOTE

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

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

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

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

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22151. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

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

Indexes to this report (by keyword, author, personal names, title and series) are available through Bell & Howell, Old Mansfield Road, Wooster, Ohio, 44691.

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

<b>BIBLIOGRAPHIC DATA SHEET</b>		1. Report No. JPRS 71815	2.	3. Recipient's Accession No.
4. Title and Subtitle WORLD EPIDEMIOLOGY REVIEW, No. 104			5. Report Date 6 September 1978	6.
7. Author(s)			8. Performing Organization Rept. No.	
9. Performing Organization Name and Address Joint Publications Research Service 1000 North Glebe Road Arlington, Virginia 22201			10. Project/Task/Work Unit No.	
			11. Contract/Grant No.	
12. Sponsoring Organization Name and Address  As above			13. Type of Report & Period Covered	
			14.	
15. Supplementary Notes				
16. Abstracts  The report contains worldwide press and radio coverage of incidence, outbreak, and other aspects of human, animal, and plant diseases, insect pests and control, sanitation conditions, immunization and public health programs.				
17. Key Words and Document Analysis. 17a. Descriptors  Worldwide Clinical Medicine Environmental Biology Hygiene and Sanitation Microbiology				
17b. Identifiers/Open-Ended Terms				
17c. COSATI Field/Group 2E, 6E, 6F, 6I, 6M				
18. Availability Statement Unlimited Availability Sold by NTIS Springfield, Virginia 22151			19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 66
			20. Security Class (This Page) UNCLASSIFIED	22. Price PCA#4

# WORLD EPIDEMIOLOGY REVIEW

No. 104

## CONTENTS

PAGE

### HUMAN DISEASES

#### BRAZIL

Health Authorities Deny Yellow Fever Outbreak in Para  
(O ESTADO DE SAO PAULO, 25 Jul 78)..... 1

#### Briefs

Meningitis Cases 2  
Vaccines Against Measles 2

#### BURMA

Canada To Help Battle Diseases in Burma  
(THE WORKING PEOPLE'S DAILY, 18 Aug 78)..... 3

#### CHILE

#### Briefs

Meningitis Vaccination Campaign 4

#### IRAQ

#### Briefs

Cholera Reports 5

#### JAPAN

Cholera Cases on Flights From India, Philippines  
(KYODO, 18 Aug 78)..... 6

CONTENTS (Continued)	Page
MALAYSIA	
Information Ministry: Cholera Spreading (KIN KWOK DAILY NEWS, 20 Jul, 1 Aug 78).....	7
Six More Cases Total Number 280	
NETHERLANDS	
Health Ministry Announces Polio Epidemic Has Passed Peak (NRC HANDELSBLAD, 29 Jul 78).....	8
Martinair Refuses Polio Case Transport From Canada (NRC HANDELSBLAD, 8 Aug 78).....	9
Briefs	
New Polio Cases	10
POLAND	
Roseola Prevention Program Outlined (SLOWO POWSZECHNE, 7 Aug 78).....	11
SAUDI ARABIA	
Anti-Malaria Campaign Begins in Southern District (AL-RIYAD, 27 Jun 78).....	13
Cholera Outbreak Reported in Eastern Province (AL-RIYAD, 28 Jun 78).....	14
URUGUAY	
National Commission Leads Hydatidosis Prevention Campaign (Various sources, various dates).....	16
Rosario Holds Conference, by Raul Collazo Pereira Artigas Produces Report, by Juan Carlos Lema Canelones Officials, Commission Meet Dog Control Support, by Walter Glisenti	
Medical Meetings on Nation's Agenda (Various sources, 1, 30 Jul 78).....	20
October: Internal Medicine August: Emergency Care	

BRAZIL

HEALTH AUTHORITIES DENY YELLOW FEVER OUTBREAK IN PARA

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 25 Jul 78 p 20

Text Belem--Although the Superintendency of Health Campaigns (SUCAM) has already identified eight fatalities this year, the government health agencies still deny the existence of epidemic outbreaks of Yellow Fever reported in different areas of Para. The SUCAM itself admits that it has received innumerable reports of presumed cases of Yellow Fever in the interior, almost always fatal, but the majority of the tests made by the Evandro Chagas Institute--the only officially recognized facility--do not show positive results.

The technicians acknowledge the difficulty in determining the actual number of cases of Yellow Fever that have occurred, because most of the people afflicted are in the interior of the jungle, and no official record is made even when they die. For that reason, according to one of the specialists, there are at least five cases which are never recorded for each one that comes to the attention of the SUCAM or of any other institution. Thus, in accordance with that proportion, at least 40 fatal cases must have occurred in the interior of Para this year.

What the health researchers fear most is that a migration of "hemogoguses"--the mosquito which transmits the jungle Yellow Fever--is taking place as a result of the extensive clearing being carried out in the south of Para. Besides attacking the workers who go into those cleared areas, the mosquito could be fleeing to other areas and, becoming more aggressive during such periods, is producing a larger number of cases of the disease.

8414  
CSO: 5400

BRAZIL

BRIEFS

MENINGITIS CASES--Fortaleza--The medical officials of Ceara were informed that 12 cases of meningitis had been officially reported up to yesterday afternoon in the municipio of Nerooca in the north of the state. Four of these cases had been fatal, and another two patients were brought to Fortaleza and are confined in the Sao Jose Isolation Hospital. The Health Secretariat responded that the situation is on the verge of requiring a blockade of the access roads to Nerooca, pointing out that the situation in that city is under control and that measures have been adopted to prevent new cases. But the municipal authorities of Nerooca, alarmed about the outbreak, have again appealed to Governor Waldemar Alcantara to start a general vaccination campaign. [Text] [Rio de Janeiro O GLOBO in Portuguese 23 Jul 78 p 9] 8414

VACCINES AGAINST MEASLES--Brasilia--The CEME (Drug Center) reported yesterday that with the 3 million doses of antimeasles vaccine which it will produce next year, it will be able to meet half of the national demand for that antigen, which is currently being imported from several countries. The manufacture will be done by the Bunta Institute of Sao Paulo. [Text] [Rio de Janeiro JORNAL DO BRASIL in Portuguese 25 Jul 78 p 8]. 8414

CSO: 5400

CANADA TO HELP BATTLE DISEASES IN BURMA

Rangoon THE WORKING PEOPLE'S DAILY in English 18 Aug 78 p 1

[Text]

RANGOON, 17 Aug—The memorandum of understanding between Burma and Canada for implementation of the vector borne disease control programme was signed in the office of the Director General of the Department of Health last Wednesday.

The Canadian International Development Agency (CIDA) will contribute \$ 5.65 million in united grant funds to help fight vector borne diseases in Burma.

The five-year programme will be in collaboration with World Health Organization (WHO). It is designed to reduce death and sickness due to five major diseases: Malaria, plague, dengue haemorrhagic fever (DHF), filariasis and Japanese encephalitis. The target is a 25% reduction by 1982.

Other agencies contributing to the vector borne disease control programme are WHO (\$ 1.4 million), UNICEF (\$ 1.9 million) and Burma itself, which will spend \$ 5.9 million in local costs. Canada's contribution represents 36 % of the total cost of the project and will be used to purchase insecticides, chemical prophylaxis, spraying equipment, laboratory equipment and vehicles.

Vector borne diseases are those where insects carry the disease-bearing parasites and viruses.—NAB

CSO: 5400

CHILE

BRIEFS

MENINGITIS VACCINATION CAMPAIGN--Santiago, Chile, 24 Aug (AFP)--The Chilean Health Ministry reported today that the threat of a meningitis epidemic in the Santiago metropolitan region has been overcome after a massive vaccination campaign. Over 1 million children and youths of between 2 and 18 were immunized in the 2-week campaign. Some cases have occurred in the cities of Valparaiso and Concepcion, but there has been no danger of an epidemic in those cities. [Paris AFP in Spanish 2322 GMT 24 Aug 78 PY]

CSO: 5400

IRAQ

BRIEFS

CHOLERA REPORTS--Baghdad, 24 Aug--It was stated here today that the Iraqi authorities have discovered three cholera cases in Dhi Qar province and Southern Al-Muthanna province. [Text] [Baghdad INA in Arabic 1025 GMT 24 Aug 78 JN]

CSO: 5400

JAPAN

CHOLERA CASES ON FLIGHTS FROM INDIA, PHILIPPINES

Tokyo KYODO in English 1009 GMT 18 Aug 78 OW

[Text] Tokyo Aug 18 KYODO--A young Tokyo woman has been found to be a carrier of cholera germs after her return from a tour of India and Nepal Thursday afternoon, the health and welfare ministry reported Friday. According to a report issued by the airport quarantine office, the 25-year-old woman deplaned at Narita at 1:40 pm from an Air India aircraft and underwent a medical checkup after complaining of a slight case of diarrhea. She had visited various places in southern Asia including Calcutta and Katmandu since August 5 and returned home via Bangkok and Hong Kong.

A total of 144 other passengers as well as a crew of 12 had been aboard the Air India airliner and 28 among them had proceeded to foreign countries via Narita, a ministry official said. The passengers remaining in Japan left for destinations in 20 prefectures ranging from Aomori prefecture in the Tohoku area to Kagawa prefecture in the Shikoku area.

Meanwhile, the official disclosed no symptoms of cholera have been detected in checkups on 56 persons among the 149, including crew members, who had been aboard a Sabena Belgian World airlines plane along with a male cholera victim. The man, a Yokohama businessman, returned from a Philippine tour Monday.

CSO: 5400

INFORMATION MINISTRY: CHOLERA SPREADING

Six More Cases

Malaysia KIN KWOK DAILY NEWS in Chinese 20 Jul 78 p 10

[Text] Kota Bharu, 19 Jul--Six more cases of cholera have been discovered at Kelantan. The people are from Kan-pang-ma-chang-pu-po, Po-lin-yen and Ma-lo of the Kota Bharu County area.

According to a bulletin issued by the Ministry of Information, three of them are adults and three are children.

Total Number 280

Malaysia KIN KWOK DAILY NEWS in Chinese 1 Aug 78 p 12

[Text] Kota Bharu, 31 Jul--An elderly man of 69 died of cholera last Thursday which increased the number of fatalities from cholera in the Kelantan area to 13.

According to today's bulletin issued by the Ministry of Information, the man had come from Kan-pang-che-liang of Mo-lan-ti, which is directly under the jurisdiction of Pasirmas.

In the past 3 days, 4 more cases of cholera have been discovered and the total number reached 280. Of the four new cases, three are adults coming from Tung-pai and Pasirmas of the Ko-ta-k'o-lu and the other is a girl from Kota Bharu.

According to the bulletin, 9 cases turned out to be cholera and are under treatment at the hospital. In addition, two cases turned out to be carriers of cholera. One is a woman from Kan-pang-pa-teng-chi-la of Kota Bharu and the other is from Kan-pang-pang-chiang of Pa-hsi-pu-yeh area. There is a total of 226 persons who can be considered as carriers of cholera.

Up to now four carriers are under treatment. Fourteen persons suspected of having cholera are being treated, including the four newly reported patients who are now under treatment for suspected cholera.

NETHERLANDS

HEALTH MINISTRY ANNOUNCES POLIO EPIDEMIC HAS PASSED PEAK

Rotterdam NRC HANDELSBLAD in Dutch 29 Jul 78 p 3

[Text] The Hague, 29 July - The polio epidemic is past its peak, the Ministry of Health announced yesterday after two new cases of polio were reported. "A number of recent reports concerned patients who had become ill several weeks earlier. This caused the false appearance of a revival of the epidemic," the ministry stated.

The two patients reported yesterday to have polio are a 3-month-old girl from Zeeuwse Mariekerke and a 12-year-old girl from Barneveld. They became sick in the middle of June and were admitted to the hospital with mild symptoms of paralysis. The children had not been vaccinated against polio.

The total number of polio cases has reached 95 since the first report in April of this year. In a number of cases the infection with polio has not resulted in any permanent - serious - paralysis.

In the course of August, according to the Ministry of Health, there will be a preparatory meeting of a commission to study the experience with the epidemic and the question of whether there is reason to revise the policies that have been followed thus far. Provisionally, the ministry sees no reason to do so, - an opinion that is shared by the consultants who have been serving as advisers.

8815

CSO: 5400

NETHERLANDS

MARTINAIR REFUSES POLIO CASE TRANSPORT FROM CANADA

Rotterdam NRC HANDELSBLAD in Dutch 8 Aug 78 p 3

[Text] Rotterdam, 8 August - The Dutch airline Martinair is unwilling at present to take care of the return flight of a 17-year-old Dutch boy who is in Canada at the moment and appears to have contracted polio there.

Even though according to a spokesman for the Ministry of Health the risk of contagion to the rest of the passengers is "slight," medically speaking, the airline considers it unacceptable to take the risk "willingly and knowingly."

Elsinga, a spokesman for Martinair, expects that the risk will be over in a few weeks. Then the boy can be brought to the Netherlands on a Martinair charter flight or on a scheduled flight.

For the time being there is no question of a special ambulance flight, as there is no great haste about the boy's return. Both he and his family can understand the situation.

Two Sisters

The number of polio cases has risen by 2 to 98. Mild symptoms of paralysis were detected today in 2 sisters, ages 14 and 16, from Rhenen. The girls had not been vaccinated.

8815

CSO: 5400

NETHERLANDS

BRIEFS

NEW POLIO CASES--Utrecht, 1 July--Thursday and Friday 3 new cases of infantile paralysis were reported to the Ministry of Health, bringing the total number up to 72. A 26-year-old woman from Bennekom, a 13-year-old girl from Nieuw-Lekkerland, and an 8-year-old boy from Opheusden were admitted to the hospital with polio symptoms. [Text] [Rotterdam NRC HANDELSBLAD in Dutch 1 Jul 78 p 3] 8815

CSO: 5400

## ROSEOLA PREVENTION PROGRAM OUTLINED

Warsaw SLOWO POWSZECHNE in Polish 7 Aug 78 p 5

[Article by MZ: "Anti-Roseola"]

[Text] Almost everyone is familiar with roseola [German measles], a common illness of childhood. Its virus, which is not dangerous to children, acts with particular virulence on the fetus of a pregnant woman should she become ill with this disease. Deafness, cardiac defect, damage to the brain and liver--these are only some of the defects with which such a child can be born. It has been shown that in Warsaw--for the surveys were conducted here--the number of children born with defects caused by the roseola virus surpasses by 10 percent those born with defects in total. This occurs, among other reasons, because the roseola virus is extremely widespread. The results of the surveys conducted by the State Institute of Hygiene (PZH) Department of Virology under the management of Prof M Kantoch is that nearly 90 percent of the girls and women have had roseola in childhood and are immune to the virus. The potential 10-15 percent who are susceptible signifies, however, that hundreds of thousands are threatened.

In connection with such a situation in Poland, a prevention program was drawn up. In the first place, there is to be a fast test to determine whether the mother-to-be is immune to the virus (had it in childhood) or whether she became infected. A method was worked out which will give results within several hours [10 to 20]. However, that method requires special preparations whose production has been undertaken by the BIOMED Association.

In the second place, a system of preventive inoculations will be introduced which will, at first, be given to women from the so-called high risk groups and, thus, to those who are in daily contact with large groups of children. In addition, the entire program was so conceived as to prevent the consequences of the infection and the infection itself. This is not an easy problem for it requires universalizing the diagnostics and, along with that, convincing the mothers-to-be who come to the

doctor of the need for such tests, as well as the efficiency of the diagnostic laboratories, which after all must test the blood samples from pregnant women for that also. The task is not easy if one considers that there are a million inhabitants here per virologist. Preventive inoculations require, on the other hand, the purchase of vaccines. This program has already, however, been approved by the Ministry of Health and initiated in Warsaw and also in Wroclaw. Therefore, everything points to this that one of the main dangers to which the child is exposed before birth will be eliminated.

CSO: 2600

ANTI-MALARIA CAMPAIGN BEGINS IN SOUTHERN DISTRICT

Riyadh AL-RIYAD in Arabic 27 Jun 78 p 2

[Article: "An Anti-Malaria Campaign Will Soon Begin in the Southern Province Where Cases Occurred"]

[Excerpts] Dr Husayn al-Jaza'iri, Saudi minister of health, declared that the campaign for the elimination of malaria and bilharziosis in the Kingdom has begun. The minister also said that a meeting will be held next Saturday in order to organize the campaign against malaria which will start soon in the southern district, where there is a concentration of this disease. The general director of preventive medicine and the anti-malaria campaign officials in the health departments in the south will also attend the meeting.

Upon his return from a visit to the southern district, the health minister, in a statement to the Saudi News Agency, talked about his trips to and tours of the southern district and the other districts of the Kingdom.

Dr Husayn al-Jaza'iri also said that his tours are conducted according to the recommendations of His Royal Highness King Khalid ibn 'Abd al-'Aziz and his crown prince who have great concern for the total coverage of medical services in the different parts of the country.

The health minister confirmed that the Ministry of Health and the Ministry of Defense are cooperating in the area of health services and that there is complete cooperation among the health authorities in both ministries.

The minister stated that the discussions which took place between His Royal Highness Prince Khalid al-Faysal, prince of the southern district, and the princes of Jizan and Najran were effective in modifying some health services and in improving quality, which will insure the best health services for the citizens of the southern districts.

Mr Husayn al-Jaza'iri also added that the health ministry will always be active in the field of immunization and fighting diseases, including tuberculosis.

CHOLERA OUTBREAK REPORTED IN EASTERN PROVINCE

Riyadh AL-RIYAD in Arabic 28 Jun 78 p 2

[Article: "The Few Cholera Cases Which Appeared in the Eastern Province Are Limited and Scattered"]

[Excerpts] The deputy minister of health for health affairs stated that the few cholera cases which were discovered in some cities in the eastern province are now being treated in al-Dammam Central Hospital, and the Ministry of Health took the proper measures to study the situation for the purpose of immunization and prevention of an outbreak. "A vaccination campaign will not take place because it was proven that it would have no value, since the results would be limited and adherence to cleanliness would be a more effective preventive measure," the deputy minister added.

Dr Hamad al-Suqayr, deputy minister of health for health affairs declared that the cholera cases which were discovered in the eastern province were very limited, mild and scattered, and that no deaths occurred. In a statement to the Saudi News Agency, Dr al-Suqayr said that the World Health Organization was informed about the appearance of some cholera cases, and that the Kingdom has asked the organization to delegate two of its experts to help trace the causes of the cholera outbreak and to help put an end to it as soon as possible.

Dr al-Suqayr explained that this cholera microbe is the same microbe which appeared in previous cases in Khaybar and al-'Ahsa', and it is very mild; the cases which appeared recently resulted from those who carried the microbe from the cases which occurred during the past years.

Dr al-Suqayr mentioned that the cause for this was the fact that the microbe carriers do not show any symptoms of the disease, which leads to the difficulty of discovering cases. In addition to that, Dr al-Suqayr said that the lack of care in general health, the inability to resist the disease, improper attention to personal cleanliness and other reasons also increase susceptibility.

Dr al-Suqayr indicated the cooperation of the different officials in taking the proper measures to fight the disease, and declared that a higher committee for environmental health was formed in the eastern province in order to study the situation and to take the proper measures which would insure the elimination of the disease and the prevention of an outbreak.

Dr al-Suqayr added, "Precautionary measures are continuing, but in certain cases it is hard to discover the microbe carriers who live among us without showing any symptoms and spread the disease.

"This is the cause for the presence of these mild cases."

As to whether the Ministry of Health will carry out an intensive anti-cholera vaccination campaign, Dr al-Suqayr said, "Previous experiences and the scientific research which was conducted in different parts of the world, in addition to the advice of the World Health Organization, lead to the conclusion that the results of an intensive vaccination campaign are limited if conducted as a preventive measure. The Ministry of Health does not intend to carry out an intensive vaccination campaign in the eastern province, or in other areas. The ministry intends to vaccinate the disease carriers who show a negative cholera microbe test result. If test results prove positive, the carriers will then be given the proper treatment to eliminate the disease.

"The cases which appeared were very mild and there is not a rapid serious increase in the number of cases which are limited and scattered in different areas and villages in the eastern province due to the presence of microbe carriers there.

"The situation does not call for alarm and apprehension."

Dr al-Suqayr added that most of the cases are being treated in al-Dammam Central Hospital and urged the citizens to adhere to cleanliness, which is called for in our Islamic religion.

8988

CSO: 5400



URUGUAY

NATIONAL COMMISSION LEADS HYDATIDOSIS PREVENTION CAMPAIGN

Rosario Holds Conference

Montevideo EL PAIS in Spanish 3 Jul 78 p 24

[Article by Raul Collazo Pereira]

[Text] Rosario--Continuing with the health education plan concerning hydatid cysts, a disease which is plaguing our country and daily taking more human lives and tremendously threatening the economy of the country, the Honorary Departmental Commission for the Campaign Against Hydatidosis, headed by Col Enso J. Curutchet, chief of police, held a meeting at the Rosario Cinema on the night of Monday, 12 June. The gathering was similar to those already held in the cities of Colonia and Carmelo, and like them, it was attended by a large number of departmental authorities and a large number of students on various levels.

The meeting included a lecture during which the means of eradicating this disease was explained and the major outlines of the municipal decree which has already been approved by the neighborhood council, as No 128/978, were announced. This decree requires, as of 1 July 1978, a sworn statement of dog ownership in the rural and urban zones of the department, as well as the treatment of dogs for parasites by means of a taeniocide known as Droncit.

Col Dr Luis A. B. Guarino, executive director of the national commission, spoke, as did the head of its health education department, Mrs Maria Arla de Castro. Dr Luis A. Raimondi and Dr Nestor C. Fontana spoke on behalf of the departmental commission.

Later during the meeting, a color film entitled "Hydatidosis" was shown, and, in conclusion, the speakers responded to questions from the audience pertaining to the subject dealt with at the meeting.

## Artigas Produces Report

Montevideo LA MANANA in Spanish 23 Jul 78 p 6

[Article by Juan Carlos Lema]

[Text] Artigas--The Honorary National Commission for Combating Hydatidosis has sent to its counterpart in the department of Artigas a memorandum stressing the importance of the sampling for purposes of evaluation to which the Artigas plan was subjected, with total success, resulting in a report which will be publicized throughout the national territory.

On 8 June, the National Honorary Commission decided to send a message of congratulations to the Artigas departmental commission, and to assess and distribute among the members of the Honorary Commission and the departmental commissions the report produced, and finally, to send official letters to the ministers of interior and public health with copies of the report attached.

The main part of the message read as follows: "Since through the report mentioned, the importance of the tasks carried out by the departmental commission is made clear, this commission sends you and the members of your department its warmest congratulations, urging you to continue your efforts to achieve the goals set in the struggle to eliminate the terrible scourge of hydatidosis throughout our national territory."

### Canelones Officials, Commission Meet

Montevideo EL DIA in Spanish 26 Jul 78 p 10

[Text] Canelones--A meeting held at the premises of the Commercial and Social Center was attended by members of the National Commission for the Campaign Against Hydatidosis, representatives of the police command of the department and the municipal government.

The executive director of the national commission, Luis Guarino, presided at the gathering.

Also present were Col Arturo D. Milans, the Canelones police chief; the municipal interventor, Gervasio Gonzalez; commission officers and other departmental authorities.

Officers from the various police precincts and representatives of the local councils and the educational system also participated in the talks.

One of the subjects taken up was the registration, control, treatment and ownership of dogs.

## Legal Provisions

All those who own or keep dogs in any capacity are required to make a sworn statement in accordance with the regulations currently in effect, and in the form for which they provide.

The ordinance provides that on any given premise or property a maximum of two dogs may be kept, without restriction as to their sex.

Those who are registered with the DINACOSE may keep up to the maximum of three dogs per establishment, with the further provision that on the basis of a prior request with justification, authorization for a larger number may be granted.

No indication is established where establishments raising dogs with registered pedigrees are concerned.

Licenses must be purchased for dogs three months of age and older.

The issuance of and checking on dog licenses, as well as collection of the corresponding fees, will be done through the police. Each licensed animal must wear a tag as proof.

Another of the subjects discussed, again in connection with dog ownership, involved reiteration of the prohibition on the use of raw viscera for the feeding of dogs.

Any owner of cattle, sheep, or swine, which species can transmit hydatidosis, must also, as the regulations of the DINACOSE provide, as moreover is already well-known, make a sworn statement as to the animal stock they have. The ordinance further requires that dead animals must be cremated or buried to prevent the development of any focus of infection.

Those who violate these resolutions will be harshly penalized.

By means of the discussions at this meeting held in Canelones, the ordinance in question was further publicized and the campaign against hydatidosis in the department was reorganized.

The meeting ended with the projection of a documentary film on persons and animals affected by hydatidosis.

## Dog Control Support

Montevideo LA MANANA in Spanish 28 Jul 78 p 12

[Article by Walter Glisenti]

[Text] Colonia--The Honorary Departmental Commission for the Campaign Against Hydatidosis is receiving substantial popular support in its control of dog ownership.

This commission, which is acting in accordance with the pertinent municipal ordinance, reported that in an eight-day period during the month of July, 2,053 sworn positive statements and 254 negative ones were recorded at the 18 police precinct stations, and 1,639 dog licenses were issued.

The period for compliance with the provisions promulgated by the authorities ends this coming 31 July.

5157

CSO: 5400

URUGUAY

MEDICAL MEETINGS ON NATION'S AGENDA

October: Internal Medicine

Montevideo LA MANANA in Spanish 1 Jul 78 p 13

[Text] Applications are now being accepted for the Ninth National Congress of Internal Medicine which will be held in our capital 25-27 October 1978.

Applications are being accepted by the Secretariat of the Congress, 1305 Juncal Street, 11th Floor, Suite 1103. It should be noted that the deadline for applications is 31 July; therefore, the Organizing Committee asks all interested persons to take action on a timely basis.

August: Emergency Care

Montevideo EL PAIS in Spanish 30 Jul 78 p 14

[Text] Distinguished Uruguayan, Argentine doctors and others from various parts of the world will attend three meetings on emergency care which will be held in Montevideo under the auspices of the Ministries of Education and Culture and Public Health.

These meetings constitute the "First Rio Plata Congress of Emergency Surgical Treatment" which will take place simultaneously with the "Third Argentine Congress on Emergency Pathology" and the "First Uruguayan Congress on Emergency Surgical Treatment."

The opening ceremony will take place on Thursday, 24 August, at 1700 hours, in the Dr Carlos Vaz Ferreira Auditorium of the National Library, and the sessions will be held from 25-27 August on the third floor of the "Dr Manual Quintela Polyclinic Hospital."

The program of activities includes a full agenda with round tables and discussions on subjects of the specialty, as well as receptions in the Argentine Embassy and a series of social activities for those attending the meeting and their friends.

This important medical meeting was declared of national interest by means of an Executive Decree.

URUGUAY

HOSPITALS, MEDICAL CENTERS RECEIVE ASSISTANCE, PROSPER

Equipment From Hungary

Montevideo EL DIA in Spanish 8 Jul 78 p 6

[Text] The Ministry of Public Health has obtained medical equipment from Hungary totaling 4.3 million dollars up to now, according to an announcement made by official sources.

The operation was finalized thanks to a trade agreement signed with that country which also includes other transactions.

This valuable equipment--part of which has been received, with the rest in transit--has been (or will be distributed) on a phased basis.

Spokesmen said that mobile X-ray equipment for surgery had been delivered, with image intensifiers and a television setup with monitors for observation in the Pereira Rossell, Pasteur and Traumatology hospitals.

The first of the health centers mentioned also received diagnostic equipment, a command center and more than 70 different accessories.

This week in the "Premature Babies" center an incubator with a scales, temperature regulator and an alarm system was installed. In the "Filter" center a biological microanalyzer of gases in the blood and all its accessories was delivered.

It was also learned that next Wednesday at "Etchepare" installation will be made of an 8-channel scanner to analyze sleep signals.

The spokesmen said that negotiations would begin shortly for the acquisition, also from Hungary and under the same arrangement, of a "computerized tomography" machine--which will be enormously beneficial--since it will make diagnostic research possible.

## Stock of Medicines

In a related connection, ministry sources stated that at present the centers are in good shape as regards supplies of medicines.

They gave assurances that there are no shortages of medicines, steps having been taken to prevent this from happening.

"All medicine distribution units have a permanent fund upon which they can draw to make the purchases needed in an emergency."

## Argentina, Clubs Make Donation

Montevideo LA MANANA in Spanish 9 Jul 78 p 28

[Article by Hector Sanchez Cuneo]

[Text] Nueva Palmira--The local Rotary Club, with the collaboration of the Rotary Club of Saavedra Oeste, Argentina, has made delivery of valuable equipment needed by the local hospital. The equipment was accepted by the director of this public health center, Dr Eduardo Muslera.

The donation consists of one BIO-80 cardioscope, one BIO-80 synchronized defibrillation system and one BIO-80 electrocardiograph system. A mobile unit for the transport of all this equipment was also received.

## Visit Brings Services Expansion

Montevideo LA MANANA in Spanish 23 Jul 78 p 36

[Article by Guillermo Rego]

[Text] San Gregorio--The recent visit of the deputy secretary of public health, Dr Jorge Nin Vivo, as it turned out, will result in this city's hospital's having its services expanded because of its distance from the Tacuarembó Departmental Center.

This factor made it uneconomical and impractical to move sick persons, whether by private transportation or Public Health Ministry ambulances.

For that reason, complete maternity services and basic or minor operating rooms reportedly will be installed which will fill an urgent need in the medical sector.

The population growth taking place in Villa San Gregorio and the surrounding territory is said to be another important factor taken into consideration by the secretariat of state.

## Rocha Has Modern Facilities

Montevideo EL DIA in Spanish 29 Jul 78 p 12

[Article by Gaby Martin]

[Text] Rocha can pride itself on having a health center equipped with the most modern technology and the best personnel and material resources permitting the treatment of the most serious cases, whether they be illnesses or accidents.

At the time of its inauguration, after long years of restoring the dilapidated hospital, there was talk of a "miracle." It is now customarily looked upon as a model hospital.

The Rocha Departmental Public Health Center operates under the direction of Dr Mario Katz, Rocha Departmental Director of Public Health and regional supervisor of the eastern region; the obstetric coordinator is Dr Hugo Perez de Castro, chief of the Health Service of the 12th Infantry Battalion and deputy director of the Rocha Departmental Center.

The center consists of:

The Rocha Departmental Hospital, the auxiliary hospitals of Castillos and Lascano (each with 50 beds) which engage in the four basic specialties, maternity centers in Chuy, San Luis, Cebollati and Velazquez, rural polyclinics in La Paloma, 19 de Abril, Valizas, Punta del Diablo, La Coronilla and 18 de Julio.

### Intensive Activity

In 1977, the following medical services were provided: 50,000 office visits; 10,000 inoculations; 1,000 operations, some of which were major surgery. Some 300 to 500 prescriptions per day are issued by the Rocha hospital pharmacy and 200 lab tests are conducted daily. The hospital has 9,000 blood donor cards in its files; this is an important life bank which permits the meeting of multiple emergencies.

This fruitful labor and constant activity, as well as the fact that the Rocha Hospital does not have to take a back seat to the best hospital in Montevideo, are attributable to four factors:

The existence of diverse and numerous facilities in all Departmental Public Health centers.

Its human resources: technicians; doctors (some 20 in number); odontologists (3); pharmacist (1); lab technicians (2); anesthetists (2); physiotherapist (1); psychologist (1); blood and plasma bank (2 female employees).

The four basic specialties are handled by the hospital: general medicine, surgery, pediatrics and gynecology.

It also has: Ophthalmology; traumatology; otolaryngology; psychiatry (few hospitals in the interior have one room for men and another for women) and cardiology (the only one in the interior which is capable of conducting ergometry).

A Nurses' Department has been in operation since 1974 and is handled by two nurses (several more are needed) who are in charge of 60 nurses and nurses' aides.

Some 15 persons are working in the Administrative Sector. They are responsible for the various auxiliary and housekeeping services (cooking, laundry, linen, sewing, drivers and porters).

There is a tuberculosis center connected with the Honorary Anti-tuberculosis Campaign Committee. A Nursing School in the Departmental Directorate of Civil Defense has been in operation since 1973. Hospital technicians serve as professors and instructors in the school which annually graduates from 10 to 15 nurses (2-year course) who immediately find positions in the hospital.

Resources.

Only part of the personnel are paid. Many persons help in the work without remuneration.

Material resources. The center has: two central heating boilers; two new ambulances, one obtained by popular donation and the other from the ministry; five completely equipped operating rooms. An emergency service which operates around the clock; however, in the summer, it is expanded because of the influx of tourists via Route 9, that is, between Brazil and Maldonado. Four X-ray machines. An equipment and sterilization room with two modern sterilizers. Incubators. Respiration revival equipment; resuscitators of all kinds and equipment for anesthesia.

Collaboration and cooperation come from diverse and varied sources. Most assistance is provided by the Ministry of Public Health.

#### Cardona Regional Hospital Improvement

Montevideo LA MANANA in Spanish 30 Jul 78 p 28

[Article by W. Rodriguez Gastellussarry]

[Text] Cardona--Infrastructure work is being done in the Dr Rogelio C. Sosa Regional Hospital in our city. During a press conference, the director, Dr Rodolfo Schayewitz, and the administrator, Andres Aguiar, gave reports. In this way, they indicated the goals they hope to reach.

The work was accomplished with the financial assistance of the Ministry of Public Health and the collaboration of the people in the region, which was channeled through the Development Committee and the Cardona Hospital Ladies' Auxiliary Committee.

The hospital is responsible for 3,307 Cardona residents who have Public Health cards. This number is increased by patients from a broad adjacent area. There are future plans for transforming the hospital into an Integral Preventive Health and Regional Assistance Center which reportedly will provide services for an area from Egana to Ismael Cortinas and from a point just before Rosario to the northern part of the region in which Cardona is located, with a human contingent of 23,000 persons.

#### Intensive Labor

As of the moment, the roof has been repaired and the shingles installed 40 years ago have been painted; sanitation is being improved; window panes are being installed where missing; and work is being done on the electric system. The Ministry also provided an ambulance which at the moment is being repaired, having suffered the first accident in 30 years of service. Logically, the period covered involved other ambulances which in turn provided service.

Through the Development Committee and the Ladies' Auxiliary Committee a burner for the incinerator was obtained; beds were repaired; 40 mattresses and pillows, three large cookers, 42 wood trays, 50 benches, two large benches for the polyclinic, one typewriter, one electronic calculator and three kerosene stoves were acquired.

#### Future Plans

Director Schayewitz also indicated during the press conference that this year the hospital expects to have a modern gas kitchen in operation and also that the ministry will approve the installation of an industrial-type laundry, as the present laundry is totally inadequate and most of the clothing is washed by hand.

With respect to the incinerator, he said that construction work will be started shortly at an approximate cost of N\$30,000.

As regards services, these will be incorporated with those of the Cardiology Polyclinic in the next few days and will be under the supervision of Dr Ariel Rodriguez Alayon.

Also, with the support of the Mercedes Red Cross and the customary assistance of public health, bed linen stocks will be increased.

### Various Services

The pharmacy is supplied with medicines. Dental services are provided in a regular manner. The polyclinic is operating very well and has the collaboration of the following doctors in an honorary capacity: Drs Hector Garcia, Roberto Martinez, Berta Diaz, Nestor Formiliano and Maria N. Cabrera. The last two doctors are now working for public health.

One thousand analyses per month are made in the laboratory with the support of technicians from Mercedes and nursing and service personnel now employed, as the result of recent appointments, who provide the required services.

Shortages continue in the specialties of anesthetist, pediatric doctor, radiology, oculist and otorhinolaryngologist. Specialists in these areas now come to the hospital periodically.

### Research Center

At the end of the press conference, a tour was made of the various departments of the hospital which permitted observation of the improvements being made, as well as the deficiencies that soon will be overcome, for the good of the entire community.

Finally, it is sufficient to note that very soon research into Chagas disease and brucellosis at the national level will be started; and the Cardona Hospital will serve as a research center, without forgetting that in a few days the mobile dispensary of the Anti-tuberculosis Campaign will be installed in this hospital.

8143

CSO: 5400

MEDICAL GRADUATES: SPECIALIZATIONS, OTHER FACTORS REVIEWED

Montevideo EL DIA in Spanish 9 Jul 78 p 13

[Article by Lucy Liguera]

[Text] A total of 3,073 doctor-specialist certificates has been issued in our country to date, bringing the number of doctors to 4,500, one of the highest in the world.

These certificates are issued by the Faculty of Medicine through the Graduate School, with the authorization of the Ministry of Public Health.

These figures and those appearing below were provided to EL DIA by the director of that school, Dr Carlos M. Sanguinetti.

There is a trend toward specialization among persons recently graduated from the Faculty who have received the degree of doctor of general medicine. This trend is the result of two basic factors: on the one hand, there is a need to obtain more in-depth training in specific disciplines of vocational interest to them; on the other hand, there is an imperative of a labor legislation kind, namely, a decree which makes it impossible to engage in any medical specialty without a degree. [Without a specialty degree] a doctor will only be able to practice in the broad field of general medicine.

This means the annual matriculation in graduate school of a number nearly equal to or greater than the number of graduates from the Faculty of Medicine the immediately preceding year.

Thus, in 1975, 475 students were graduated from the Faculty of Medicine, while in 1976, 446 enrolled as graduate students to specialize. In 1976, 434 graduated, while 447 enrolled in graduate school; i.e., all the recent graduates plus other graduates from previous years.

### Thirty-Seven Courses of Study

The Graduate School was established in 1953. Regular classes were started with eight specialists, and the first graduating class was in 1955 at which time nine persons were graduated.

At the present time, there are 37 regular courses lasting for 8 months to 4 years.

The total number of students enrolled for the first time this year is 498; in 1977, 447 enrolled.

The school's total enrollment is 1,912 doctor-students, of which 755 are women and 1,157 are men.

The courses of study preferred by the doctors are: internal medicine (advanced training for internists) with 289 enrollees of the total number of students. Pediatrics follows with 270; cardiology with 162; gynecology with 125; surgery with 11; anesthesiology with 90; psychiatry with 71, etc.

On the other hand, only 4 students were enrolled in parasitology; neuro-surgery, 9; and rural medicine, 11. These specialties with such low enrollments are the result of a limit on the number of available vacancies for internal reasons or because the future job possibilities are not good.

### Qualifying Degree

Since the school's establishment up to December 1977, a total of 3,073 specialists have been enrolled. That figure is not accurate at present, as it has not been put in order (deaths, absences from the country, revocations, etc.)

Of the 3,073, some 1,324 persons received their degrees as specialists through regular courses of the school. On the basis of Outstanding Achievement and Documented Meritorious Service, as authorized by executive decree in 1972, a mechanism was established whereby specialists actually practicing who had not completed regular courses in the Graduate School could be certified and registered with the Ministry of Public Health. The total of these individuals is 1,749.

Since then, no one may practice in any specialty unless he has the qualifying degree.

The greatest number of medical specialists in our country are to be found in pediatrics. The following chart gives the numbers of persons in several specialties, the number of doctors who received their licenses and the percentages.

	<u>Total Number by Specialty</u>	<u>Percentage of Total</u>
Pediatrics	540	17.57
Surgery	348	11.32
Gynecology	273	8.88
Internal medicine	266	8.66
Psychiatry	215	7.00
Cardiology	156	5.08
Anesthesiology	131	4.26
Ophthalmology	100	3.25

The lowest percentages are found in nuclear medicine with 6 specialists (0.19 percent), cardiac surgery with 5 (0.16 percent) and toxicology, only one specialist (0.03 percent)

in 1977, 185 medical specialists were graduated from the Graduate School. In 1976, the figure was 123.

#### Forty-Four Scholarships

Normally, persons with foreign scholarships are enrolled. Between 1976 and 1977, 44 persons holding scholarships (85 percent men and 15 percent women) studied medicine in our country. Brazil sent the greatest number of scholarship holders to Uruguay, followed by Nicaragua and Argentina.

Also, in addition to its regular courses, the school offers and sponsors skill-training and refresher courses which are directed at all Uruguayan or foreign doctors, from the Capital or the interior.

In 1977, 20 of these courses were given and in 1977 [years as published], there were 44. The courses cover all the medical disciplines. When the courses are completed, diplomas or certificates of attendance are issued. The courses are from 48 hours to 6 months or more in length, depending upon the nature of the course.

It should be noted that the graduate school utilizes professors of the departments of the Faculty of Medicine itself in the Polyclinic Hospital, as well as its teaching personnel for the preparation of courses and general activities. At times, use is made of infrastructures of the Ministry of Public Health or of other organizations.

#### Social Factors

The leading role of the graduate school is the result of the planning which the Ministries of Education and Culture and Public Health have done on behalf of national health. On the basis of this planning, the Faculty of Medicine, with its schools, trains the medical professionals and technicians needed to carry out the plan.

It is the responsibility of the graduate school to train medical specialists in the various disciplines which are needed by the country, with consideration given to a series of factors, above all social factors.

Thus, for example, in the rural areas, there are no doctors because of three principal reasons: 1. problems and deficiencies in providing adequate training to meet emergency situations in the rural area; 2. low pay; 3. distance from the scientific sectors, which made it impossible for the doctor to continue his training.

As a result of this situation, the position of Specialist in Rural Medicine was created which at the present has 11 students.

The introduction of this specialty in fact resolves the three problems by adequate training in the handling of emergencies during the course; training in pediatrics, obstetrics and gynecology. At the same time, students are given the knowledge required to provide service in the rural area; and low pay is taken care of through special salary allowances from the Ministry of Public Health.

Another specialty established this year is geriatrics-gerontology, with a total of 70 enrollees. This course responded to a reality, namely, that 14 percent of our population is of advanced age (65 years and older). Therefore, this career was introduced because the life expectancy in our country is really quite high and the birthrate very low.

8143

CSO: 5400

URUGUAY

BRIEFS

CANELONES VACCINATION SCHEDULE--Canelones--The Canelones departmental primary education inspectorate, seeking to fulfill the health education plan, is continuing its vaccination program, including the administration of triple vaccine and vaccine against smallpox and measles (from six months to four years of age). The program currently will cover all the children within a given radius of each school, where the team of vaccination personnel from the Dr Francisco Soca hospital, in the city of Canelones, will be set up. The schools listed below will be responsible for: 1. pursuing the campaign in the zone such as to ensure the vaccination of the school children and the children who are not of school age and who have not yet been vaccinated, or whose vaccinations are out of date; 2. collecting vaccination certificates; 3. providing the written authorization of the parents; 4. establishing whether there are children suffering from any disease (diagnosis) and if they are receiving medication (noting the names of the medicines). The program planned for the month of August is scheduled as follows: 3 August--School No 4 (1000 to 1100 hours); No 7 (1130 to 1230 hours); No 8 (1330 to 1430 hours); No 143 (1500 to 1600 hours); No 63 (1600 to 1700 hours). 7 August--School No 24 (1000 to 1100 hours); No 26 (1130 to 1300 hours); No 26 (1300 to 1400 hours); No 174 (1400 to 1500 hours); No 90 (1530 to 1630 hours). 10 August--School No 51 (1000 to 1100 hours); No 206 (1130 to 1230 hours); No 32 (1300 to 1430 hours); No 180 (1500 to 1600 hours); No 201 (1600 to 1700 hours). 14 August--School No 99 (1000 to 1130 hours); No 177 (1200 to 1400 hours); No 185 (1430 to 1630 hours). 17 August--School No 166 (1000 to 1230 hours); No 173 (1300 to 1430 hours); No 197 (1500 to 1700 hours). 21 August--School No 65 (0930 to 1100 hours); No 72 (1100 to 1230 hours); No 45 (1300 to 1500 hours); No 168 (1530 to 1630 hours). 24 August--School No 59 (1000 to 1130 hours); No 12 (1230 to 1330 hours); No 92 (1400 to 1530 hours); No 14 (1600 to 1700 hours). 28 August--School No 1 (0930 to 1030 hours); No 40 (1100 to 1200 hours); No 10 (1300 to 1400 hours); No 54 (1430 to 1530 hours). 31 August--School No 33 (1000 to 1100 hours); No 15 (1130 to 1230 hours); No 13 (1330 to 1530 hours); No 134 (1600 to 1700 hours). [Text] [Montevideo LA MANANA in Spanish 31 Jul 78 p 20] 5157

CSO: 5400

AFRICAN SWINE FEVER CONTINUES TO PLAGUE CONTINENT

Eradication Investment, Experts Dispatched

Montevideo EL PAIS in Spanish 7 Jul 78 p 7

[Text] The Uruguayan Government will reportedly adopt far-reaching resolutions concerning the African swine fever epidemic that has affected a vast region of Brazil for several weeks.

Official sources in the Ministry of Agriculture and Fishing have told EL PAIS that a package of measures will be approved in the days to come, aimed at maximizing sanitary control in areas bordering on the enormous nation to the north.

Technical Delegations

There are also plans to send technical delegations to Brazil and probably Peru, where a continental meeting will be held with the assistance of Latin American experts. Both meetings will make it possible to evaluate the epidemic and combine criteria on policies to be carried out in the sub-continent.

The Agriculture and Fishing spokesman said that in Uruguay, there has not been a single case of swine fever (the last one was in 1920) and that the Animal Health Services have adopted various measures aimed at strengthening the sanitary barrier constructed all along our border with Brazil.

Rio de Janeiro

Swine fever was detected about a month ago in Rio de Janeiro. It later spread with dizzying speed to other adjoining states, which forced the government of Brazil to adopt crucial decisions consistent with exterminating the entire swine population affected by the virus.

There are probably two paths by means of which the pathogenic virus causing the disease entered the country from Africa. It is definitely known that it arrived through the Rio de Janeiro International Airport. The carriers

were evidently: 1) the remains of diseased animals imported from Africa and later sold as food for animal consumption; and 2) refugees from Angola. The second hypothesis is gaining followers in scientific circles.

#### New Type Virus

Veterinarians are bewildered by the traits which this atypical strain of swine fever presents and for which there is no vaccine. Hogs suffering from the disease begin to stagger, red spots appear on the skin and fever sets in. From this time on, experts say, the excrement and saliva of the diseased hogs can soon contaminate entire areas.

When a clinical picture of this type is diagnosed, they add, then all hogs within an area of 60 kilometers must be killed, and all chickens, ducks, cats, dogs, cattle and other animals considered to be potential carriers must also be eliminated. Man himself is also a potential carrier (although the virus is not a danger to health), meaning that any person in contact with sick animals must be disinfected and clothing worn destroyed.

#### Brazil

In order to exterminate diseased hogs and compensate owners, the government of Brazil has already spent \$50 million in the area of Rio de Janeiro alone. Some 190,000 head of swine were located there, an EFE cable states.

The Spanish news agency considers that the current situation in the northern nation "is extremely complex" and tends to "take on truly catastrophic proportions for Brazil's domestic and foreign economy at a time when the prolonged drought has reduced the production of wheat, soybeans, coffee and other farm products."

#### Exterminations, Spread to Venezuela

Montevideo EL PAIS in Spanish 8 Jul 78 p 6

[Text] The UN Food and Agriculture Organization (FAO) will call a meeting of Latin American veterinary experts, to be held in Lima in the middle of next week, in order to examine the swine fever situation, which from its epicenter in Brazil is now threatening to spread throughout the region.

As EL PAIS reported in its evening paper, the Uruguayan Government is now studying the adoption of a series of measures aimed at increasing the margins of health safety presently followed, although they are considered to be excellent.

#### Uruguay To Send Technicians

Among the decisions to be implemented in the immediate future is the sending of technicians to Brazil and the meeting in Peru, organized by the FAO in

order to sponsor a broad exchange of information and coordinate the adoption of prophylactic policies preventing the expansion of the serious disease.

"At the present time, the swine fever epidemic is threatening to spread to Venezuela," an EFE dispatch reads. It goes on to state that this information was made public in Caracas by FAO officials following talks with that nation's minister of agriculture and livestock raising.

The only previous outbreak of the swine fever in Latin America was in Cuba in 1971, when Castro's government was forced to kill half a million head of hogs in order to eradicate it once and for all.

#### Brazilian Picture

"In Brazil, the situation is so grave that the government has labeled it as very critical and ordered a ban on hog exports. It has also decided to exterminate over 16 million head of hogs," the cablegram from Venezuela states.

According to information from the FAO, the swine fever reportedly began in Africa, spread over the map of Europe to Portugal, Spain, the islands of Sardinia and Malta. In Latin America, it is hoped that the epidemic can be controlled in Brazil, where authorities are making enormous efforts in that direction. They have ordered the armed forces to destroy all centers of infection found in five states of that South American country.

#### Lima Meeting: Continental Endeavor

Montevideo EL DIA in Spanish 8 Jul 78 p 11

[Text] Los Dres, Bartzabal and Queirolo will represent our country at the emergency meeting to be held in Lima on 13 and 14 July in order to adopt continental measures aimed at controlling the African swine fever epidemic that has broken out in Brazil and that is inexorably advancing.

In order to coordinate details for the meeting, Dr Charles Griffiths, general director of the Veterinary Services of the FAO, was in Montevideo for 24 hours. It is the FAO which is organizing the emergency meeting to be held in Peru, on the Pacific, and although the centers of infection are on the Atlantic coast, the capital city of Lima was chosen since it is the headquarters of the Pan American Health Organization which has offered its premises, facilities, technicians and all the infrastructure it has set up throughout Latin America.

#### Meeting With Meyer

According to sources in the FAO office in Montevideo, the prominent English veterinarian has held meetings with his colleague from the Veterinary Services of Uruguay, directors of animal health and the livestock industry, DILFA [expansion unknown], and the Dr Rubino Research Center, and finally, with acting Minister of Agriculture and Fishing Luis H. Meyer, who decided to send Los Dres, Bartzabal and Queirolo.

Dr Griffiths arrived from Argentina and left for Chile in order to ensure the participation of all countries potentially affected by the African swine fever that has reached catastrophic proportions in Brazil, despite all the efforts made and the massive deployment of the men and resources of the armed forces aimed at controlling any spread of the virus and the elimination and burning of herds in zones of infection that are detected.

According to the FAO expert, it has been established that the disease broke out in Rio de Janeiro as the result of feeding hogs on garbage from planes, presumably from Europe and the Iberian Peninsula, where the fever is endemic and where, as a result, governments are forced to pay producers some \$22 million a year in compensation.

Based on what was said, this hypothesis is supported by the fact that the "subacute" features of the virus identified in Brazil are similar to those in Portugal and Spain. Furthermore, it is a very virulent strain which can survive up to a year under cool climatic conditions.

#### Alarm in Pork Industry

Montevideo LA MANANA in Spanish 9 Jul 78 p 15

[Text] Swine fever, identified as an African variety that has been detected in Brazil and is steadily advancing, has given rise to alarm in our country and throughout the continent because of the catastrophic consequences it could have on the pork industry, inasmuch as it can only be fought by eliminating and burning herds in the areas affected.

For the purpose of adopting measures aimed at controlling the swine fever on the continent, Dr Luis P. Bartzabal, director of the Veterinary Services of the Ministry of Agriculture and Fishing, and Dr Queirolo are leaving for Lima, Peru, this afternoon at 1700 hours. They will participate in the emergency meeting to begin on Thursday. In order to coordinate aspects of that meeting, Dr Charles Griffiths, general director of the FAO Veterinary Services, visited Montevideo. It is that office which, in the face of the seriousness of the situation, called the emergency meeting. While the centers of infection have been detected along the Atlantic coast, the meeting will be held on the Pacific in the city of Lima, headquarters of the Pan American Health Organization, which has offered its experts and its entire infrastructure set up to take care of this type of problem in Latin America.

#### Countries Potentially Affected

Before coming to Montevideo, the FAO official had gone to Argentina and yesterday, he went on to Santiago, Chile, for the purpose of ensuring the presence of representatives from all the countries potentially affected by this disease, which is taking on catastrophic dimensions in different states of Brazil, where despite all the enormous efforts made and the massive deployment of men and resources of the armed forces, it has not been possible to contain the expansion of the swine fever which is so easily spread.

## Border Control

Although it is not officially known what measures will be adopted by Uruguayan authorities, circles close to the Veterinary Services of the Ministry of Agriculture and Fishing and Animal Health said yesterday that one of the first measures has to do with strict control of the borders from Bella Union to El Chuy in order to prevent irresponsible persons from bringing in animals or pork products that might contain the virus.

## Food From Europe or Africa

According to Dr Griffiths' reports, the disease began in Rio de Janeiro as the result of food acquired for pigs by a person at the El Galeao Airport, specifically from a plane presumably coming from Europe (Iberian Peninsula), where swine fever is endemic. The food was later distributed among several herds and rapidly spread over bordering states. The disease has not yet reached Rio Grande do Sul, one of the states with the most swine herds. The danger of its reaching that state is due to the fact that it is a very virulent strain which can survive up to a year under cool climatic conditions.

## Transfer Healthy, Report Detections

Montevideo LA MANANA in Spanish 27 Jul 78 p 1

[Text] Last evening, the Ministry of Agriculture and Fishing urged all hog producers in the country to proceed immediately to slaughter all animals in good health in order to prevent the African swine fever from reaching our country.

This official notice was published last evening in a bulletin from the National Public Relations Directorate, which also states that in the area bordering on Brazil, all hog must be eliminated, either by their transfer to sites far from the border or by the slaughter of the animals.

Official spokesmen told LA MANANA last night that an attempt is being made to reduce the country's hog population to the maximum extent possible. It was also officially stated that the hunting (elimination) of wild pigs and boars is recommended throughout the national territory.

Prominent producers contacted by LA MANANA last night said that they will ask for a meeting with national authorities in order that they might be allowed to operate at a slaughterhouse specifically designated for the killing of hogs. In this way, they would be able to sell these animals slaughtered at home or abroad since it has been repeated on several occasions that the disease has not yet reached our country and that the measure recommends the slaughter of healthy animals.

In addition, it is important to reiterate that the disease does not affect man. Its effect is economic. In our country, there are now between 350,000 and 400,000 head of hogs, mainly located in the departments of Canelones,

Colonia and San Jose. However, Rocha and Treinta y Tres, which both share borders with Brazil, are also large producers.

#### Sanitary Belt

According to the same authorities consulted, the basic aim is the practical isolation of all the northern region of the country from Brazil so as to prevent contagion. To that effect, a 50-kilometer-wide strip of land along the border is being set up from which every last hog would be eliminated. In addition, producers throughout the country are being advised not to feed their hogs raw garbage from hotels, restaurants and military barracks. Control measures are being strengthened to prevent persons entering the country from bringing in pork products, and measures are being taken to disinfect vehicles entering the territory.

#### Official Bulletin

The African swine fever is an infectious disease produced by a virus that only affects hogs. The disease does not attack man. Its most serious effect is economic in nature, since it is often necessary to kill 100 percent of the animals affected, with the resulting damage to national farming.

The disease, which comes from Africa, has spread throughout several nations of the world inasmuch as there is no vaccine or serum or treatment for it. It is endemic in Spain and Portugal and there are also cases in Italy and France. In Latin America, Cuba suffered an outbreak in 1971. The disease was recently discovered in Brazil and has affected several states, except for Rio Grande del Sur.

Hogs contract the disease by direct contact with sick animals, the ingestion of contaminated feed and other indirect means, including transmission by insects, vehicles and even humans.

The Technical Services of the Ministry of Agriculture and Fishing have recommended the adoption of various measures in order to prevent the disease from entering our country.

The most important measure recommended is to reduce the number of hogs, proceeding to the immediate slaughter of those in good health. Consequently, producers are asked to reduce their herds to the maximum extent. With respect to the area bordering on Brazil, all hogs must be eliminated, either by their transfer to distant places or direct slaughter. Likewise, the hunting (elimination) of wild pigs and boars throughout the national territory is recommended.

African swine fever and the classic swine fever are very similar in their symptoms. As a result, in order to prevent confusion and at least, prevent the second disease from occurring, it is asked that all hogs in the country be vaccinated after weaning with the immunization that exists for the traditional virus.

In cases where animals are found to exhibit symptoms of swine fever, it will be considered, for all practical purposes, that the disease in question is African swine fever. The official Veterinary Service is to be notified immediately of any serious abnormality in hogs so that the problem may be studied and diagnosed immediately.

Producers are also urged not to feed their hogs on raw garbage from hotels, restaurants and similar places of residency.

Control measures will be stepped up so that persons arriving in the country will not be able to bring in pork products. Vehicles entering the territory are already being disinfected.

Health authorities are asking the people to cooperate on the different preventive measures explained. If the recommended measures are carried out, a great deal will have been done to safeguard national farming.

#### Eliminate Boars, Later Shipments

Montevideo EL PAIS in Spanish 27 Jul 78 p 1

[Excerpt] The General Directorate of the Veterinary Services of the Ministry of Agriculture and Fishing has advised a drastic measure because of the African swine fever. In order to prevent propagation of the disease, it is recommended that the number of hogs be reduced by the immediate slaughter of all those in good health. Animals found in the area bordering on Brazil should be eliminated from the zone, either by transfer to distant sites or their direct slaughter. It is also recommended that wild pigs and boars be hunted (eliminated) throughout the national territory.

Sources linked to hog producers told EL PAIS last night that there are approximately 500,000 head of hogs in the country and that the measure recommended involves grave economic losses for producers. The only way of preventing the loss is for the government to buy hogs to be slaughtered, the sources say, and then have them stored in slaughterhouses to be sold on the market later.

Finally, the sources consulted said that it is indispensable for the government to adopt such a measure if hundreds of producers are not to be forced into bankruptcy.

#### Businesses Closed

Montevideo EL PAIS in Spanish 28 Jul 78 p 10

[Text] Twenty-seven business establishments guilty of infractions have been closed by the General Inspection Service of the Municipal Mayoralty, which also shut down the operation of several illegal hog breeding operations where the animals were being fed garbage. The teams also stepped

up their activities in order to eliminate garbage pickers and a review is being made of authorizations granted to dumps which buy paper and other items. In addition, many banana-selling booths which were using fixed scales were torn down.

Moving ahead with great speed, the inspection and control teams of the General Inspection Service of the Municipal Mayoralty of Montevideo are implacably applying measures outlined in order to ensure compliance with standards relating to public tranquillity and hygiene.

The action became necessary in the face of an increase in infractions of all kinds committed despite rigid controls.

For example, following the recent closing of several illegal hog-raising operations, many pigpens were found in recent days where the animals were being fed garbage, which could well be a factor in the dreaded swine fever, precisely at a time when the sale of pork products is increasing.

#### Collectors

The repressive action has not been confined to the closing of these "establishments" and the seizure of the hogs, but rather, has been extended to the persons who, illegally and by using handcarts and other small vehicles, engage in the collection of paper and waste in the downtown area in order to sell it to dumps -- whether or not they are authorized -- located at strategic points.

Concerning this matter, it can be reported that the municipality is taking up the task of reviewing all authorizations granted to the owners of these establishments, which are obviously the centers which attract the waste collectors.

#### Sales

In addition, there is a daily inspection of unauthorized vendors, who mainly operate on the 18 de Julio, 8 de Octubre, Libertador Lavalleja and Agraciada avenues, as well as in the peripheral areas (close to the markets).

There is also a continuation of the suspension of permits held by salesmen who, in order to expand, sell unauthorized articles. In such cases, the unauthorized goods are confiscated.

The inspectors have continued their veritable fight with the banana sellers who take up spaces on the downtown street corners and sell their goods, which are generally smuggled in, at higher prices, while using scales on which the kilogram is only 600 to 800 grams. This shows how innocent buyers are taken in. Recently, nearly 100 of these "interesting" scales have been seized.

## Closings

The General Inspection Service, which has proceeded to close 27 various establishments which failed to abide by existing regulations, has evicted and confiscated the merchandise of many food product vendors, most of which sold were selling sausages and refreshments from carts on the public streets.

## Plant Negotiations, Paraguay's Campaign

Montevideo EL PAIS in Spanish 28 Jul 78 p 8

[Text] "We hope that the proper authorities will take the measures recommended by the General Directorate of Veterinary Services of the Ministry of Agriculture and Fishing having to do with the slaughter of hogs now in good health and the elimination of swine from the area bordering on Brazil," sources close to swine producers told EL PAIS.

For his part, the president of the Hog Raising Association of Uruguay, Jaime Cardoso Cuenca, said that the institution had already taken steps asking the different authorities to set up a slaughterhouse and cold storage plant immediately to handle all animals now ready for processing.

"The plant could be the Melilla Slaughterhouse," our source told us, "because it is in perfect condition. We could also use the National Lamb Slaughterhouse, which would have to be rehabilitated."

It is indispensable to have plants because producers are now ready to process 4,000 to 5,000 hogs a week. If the proposed measures are implemented, this number will rise considerably since the number of head of hogs in our country is 500,000.

Another matter for concern is the economic aspect and the producers are hoping that the authorities will grant a special credit line to enable them to meet the expenditures occasioned by the use of the cold storage houses.

Another solution proposed by the producers would be for the state to buy all production and later place it on the market in a manner preventing a drop in prices.

## Not Contagious to Man

"It must be made perfectly clear that African swine fever cannot be transmitted to man and therefore, the consumption of pork and pork products presents no risks to the population," EL PAIS was told last night by Dr De Freitas, from the Dr Miguel C. Rubino Biology Laboratory.

Naturally, hogs that have died from the disease are not going to be placed on the market since there already exist rigid sanitary controls, but if any person should eat meat from an animal suffering from the African swine fever, there is no history of contamination.

Finally, Dr De Freitas said that to date, not one case has been detected. In Pando, the necessary measures are being taken to contain the disease if it should slip through the control measures taken on the northern border.

#### Paraguay

Information from Asuncion states that the Ministry of Agriculture and Livestock Raising has announced that the national campaign to fight the African swine fever will require an investment of \$350,000.

According to a cable from the EFE agency, authorities in the area announced that in order to carry out the campaign, the government has asked for the financial cooperation of several international organizations, including the IDB [Inter-American Development Bank].

Among the activities planned by the Ministry of Agriculture is epidemiological control along the Brazilian border and along part of the border with Argentina.

Soon after swine fever was found in Brazil, the Paraguayan Government banned the introduction of live hogs, hog semen, and products or by-products from countries or continents where the rare disease has been found.

#### Local Producers Analyze Measures

Montevideo LA MANANA in Spanish 31 Jul 78 p 11

[Articles by Juan Carlos Lema and Danie Rondan]

[Text] Artigas--The Ministry of Agriculture and Fishing's recommendation that producers throughout the country immediately proceed to slaughter healthy hogs in order to prevent the African swine fever from spreading to our country has caused local producers to meet for the purpose of considering the important subject. The group awaits new measures that the authorities might adopt on the question.

#### Salto

In the meantime, correspondent Cesar Ruben Balbela reports that the recommendation was analyzed thoroughly even though the media consulted said that the health problem is under control. At any rate, emphasis will be placed on preventing the disease and the necessary support will be provided so that the entire northern region of the country will be isolated from Brazil, thereby preventing contagion.

As reported, African swine fever is an infectious disease caused by a virus that only affects hogs. It does not attack man. Swine contract the disease by direct contact with diseased animals, the ingestion of contaminated food and other indirect means, including transmission by insects, vehicles and humans.

Mercedes

When questioned, Daniel Vega, head of the Soriano Veterinary Services, said that hog producers have been urged to reduce the number of animals in their herds. However, he emphasized that African swine fever has not entered the country and that Uruguay has no cases of the disease.

11,464

CSO: 5400

BOLIVIA

EFFORTS UNDERWAY TO BLOCK SWINE FEVER ENTRY

La Paz PRESENCIA in Spanish 20 Aug 78 p 13 PY

[Text] The Ministry of Agriculture, Livestock and Campesino Affairs has announced the implementation of emergency measures in view of the imminent danger that the African swine fever plague which is causing severe damage in Brazil might extend into Bolivia.

A meeting has been called for next Tuesday in order to reach agreements designed to thwart the danger which is threatening the swine stock.

This meeting will be attended by representatives of international organizations such as the Food and Agriculture Organization, the IDB, the World Bank, the British Mission and others.

In the meantime, the animal health division of the Ministry of Agriculture, Livestock and Campesino Affairs has issued a recommendation against importing hogs from Brazil or other neighboring countries because these imports have been forbidden to avoid contamination. Import of pork byproducts such as ham and cold cuts also has been forbidden. The animal health division has also recommended international airlines and land transport companies to burn the waste after each trip.

CSO: 5400

EEC AGREES TO RESUME BEEF IMPORTS

Small Breakthrough

Gaborone DAILY NEWS in English 1 Aug 78 p 1

[Excerpts]

The Minister of Agriculture Mr Lenyeletse Seretse told hundreds of Gaborone International Trade Fair goers that the acceptance by the European Economic Commission (EEC), to resume importing our beef was a small breakthrough.

**Officially closing the show on Saturday afternoon, the Minister said this does not, however, mean that our troubles are over since "we are still facing problems of selling our meat to the EEC, which is traditionally by far our best market".**

**"The European Economic Community, told us that they would now accept beef from animals from the south of the country. This is a small breakthrough; up to then they had refused meat from all areas despite our assurances that none of the animals slaughtered at the Botswana Meat Commission (BMC) could have been in contact with foot and mouth".**

However, the Minister added — that by this time of the year, they have exhausted the supply of cattle from the south. He explained that the total off-take from there only amounts to a few days' work for BMC each month.

He stated that this had been explained to the EEC and it, is hoped that a more helpful decision will be made. He assured the audience that there will be no risk that the disease would be carried in meat from any of the cattle which are now been handled at the slaughter in Lobatse.

He expressed disappointment at the decision made by the EEC, adding that the Government of Botswana was puzzled too.

Minister Seretse pointed out that the BMC does not intend to reduce prices over the next month, explaining that he thinks that there is still good chance that the BMC will be able to break even over this year. According to him the long term prospects remain good.

"It is symbolic of our confidence in the industry that BMC has just developed a new-product line, canned corned beef, which I hope will replace imported canned meat in stores. I have myself sampled the product and I can assure you that it is very good — much better than the imported product," he remarked.

Turning to the Trade Fair, the Minister pointed out that it has been remarkable in many ways. He observed that the stands compared favourably to those of the previous shows despite the foot and mouth disease outbreak. He said the record audience had shown its appreciation by "voting with its feet" and turning up in greater numbers than ever before.

## Further Negotiations

Gaborone DAILY NEWS in English 10 Aug 78 p 1

[Excerpt]

Botswana's Ambassador to the European Economic Community (EEC) Mrs Emelda Mathe has disclosed that her mission will be meeting the EEC on September 6 to hold further discussions on the fate of the country's beef levy arrangements.

Interviewed at the Gaborone airport on arrival for her two week leave, on Sunday, Mrs Mathe said that the EEC member countries are very highly sensitive to cattle diseases. She said whenever there is an outbreak, affected cattle are shot and destroyed in these countries, unlike in Botswana where they are treated. "This is a defensive method," she said.

Mrs Mathe said that these EEC countries therefore are committed to ensuring that all beef that enters their market is certified fit, both veterinary and sanitary wise.

The EEC recently decided to buy Botswana's beef after long lengthy discussions between the European body and high-powered delegations of the Botswana Government. Some of these delegations were led by Vice President and Minister of Finance and Development Planning Dr Q.K.J. Masire and External Affairs Minister Archie Mogwe.

CSO: 5400

## BRIEFS

FOOT-AND-MOUTH EPIDEMIC OVER--The Department of Animal Health this week announced that foot and mouth disease has been eradicated in Ngamiland and Botswana has been declared free from the disease. The restrictions on the movement of livestock within the affected areas will gradually be lifted. The movement of livestock within these areas will now be allowed on Veterinary permit. The outbreak of the disease was detected last year in October and confirmed in the Ngamiland and Central Districts. Under the European Economic Community conditions only the southern part of the country is allowed to sell its meat to the EEC member states. The outbreak has greatly affected Botswana meat exports. [Text] [Gaborone DAILY NEWS in English 9 Aug 78 p 1]

BRITISH AID--The Minister for Overseas Development, Mrs Judith Hart, and Botswana Vice President and Minister of Finance and Development Planning, Dr Q. K. J. Masire, yesterday signed notes agreeing a further 2.65m pounds British aid to Botswana. The money which is likely to be used for the control of foot and mouth disease, is an addition to the 10m pounds grant and loan made in 1976 and has been made available in response to the UN "Farah" report of July 1977. Already 350,000 pounds of additional aid bringing the total to 3m pounds, has been used for a consultants' report on the country's rail system. [Excerpt] [Gaborone DAILY NEWS in English 4 Aug 78 p 1]

CSO: 5400

BRAZIL

## POSSIBLE ORIGIN OF SWINE FEVER DISCUSSED

### Virus Behavior Raises Doubts

Rio de Janeiro JORNAL DO BRASIL in Portuguese 30 Jul 78 p 28

Excerpt The swine fever which has been afflicting Brazilian animals for the past 79 days is undoubtedly of African origin, according to the specialists of the Virology Department of the UFRJ Federal University of Rio de Janeiro, who have been isolating the virus for diagnostic purposes since 12 June. Doubts persist, however, not about the origin but about the behavior of the virus because the mortality rate is low in the southern states, something which is inconsistent with the statistics of the disease.

In medical-veterinary literature, the virus is listed under diverse subtypes which differ markedly from one another. Up to now, more than 20 subtypes have been isolated which differ not only as to their immunological behavior, but also as to their biological characteristics. On the basis of this information, the general manager of Perdigao Industry, Dr Juarez Leoni, suggests that clinical tests be conducted on healthy hogs by means of the inoculation of the product of the cultures of the Fundao Laboratory, in order to determine the degree of virulence of the African disease.

### Scientists

The diagnoses of the Virology Department of the UFRJ are backed up by the U.S. scientists of the Plum Island Laboratory, who are specialists in exotic diseases. More than 400 samples have already arrived at the Fundao Laboratory to be examined, always coded in order to prevent the 55 virologists and technicians involved in the diagnoses from learning the location of the sources. At this time, it is the only laboratory of the country authorized to perform the diagnosis, whose results are sent to Brasilia where teams of epidemiologists analyze the behavior of the virus and the extent of the disease. Besides the team of specialists, the laboratory has the advantage of sophisticated equipment and can be compared to the best in the world.

The first samples arrived at the laboratory of the UFRJ on 12 June (a month after the confirmation of the first center), and their results (positive)

were known 2 days later. Thereafter, the examinations turned into a routine for the 55 persons involved with the disease, who worked even over the weekends. The virologists explain that each diagnosis implies the isolation of a viral particle, and subsequent to each positive result, the culture is sterilized and not preserved because there is no interest in studying the virus at this time, seeing that the emergency requires swift examinations.

The samples coming from the Selection Center of Niteroi (Department of Agriculture) are in the form of spleens, livers, lymphatic nodules, tonsils and blood, and they are distributed to three sections where the tests are performed. In the hemoabsorption section, the test is performed by inoculating a suspension of the material into a culture of leukocytes, from which readings are obtained at 24, 48 and 72 hours. When the material is positive (African disease), an adherence of erythrocytes to leukocytes takes place. The culture of leukocytes is made from blood of hogs coming from a known immune breed of the Pan-American Foot-and Mouth Disease Center, located in Duque de Caxias. The blood is defibrinated and separated in layers of serum, leukocytes and erythrocytes, using only the first two in this culture into which the material is injected. If the result is negative, the material still undergoes two other injections. At times, it shows negative the first time because of the problem of virus adaptation and other factors such as the state of preservation of the sample.

At the same time, another portion of the sample undergoes the test of immunofluorescence on a slice of the organ, when the material is frozen and a combination of an antibody and a fluorescent substance is applied to it, forming an antigenic compound plus a fluorescent antibody. The coloration is greenish when positive. The material goes through eight tests in this examination, four of them made with a combination for African swine fever and four with a combination for hog cholera. A third experiment is performed through immunofluorescence in a tissue culture inoculated into the sample: with a culture of cells sensitive to the virus of the African disease and another culture of cells sensitive to the virus of hog cholera. A reading is obtained only 48 hours after the placement of the combination on the cells. After getting the three results, the Virology Department sends the diagnoses to Brasilia. Four microscopes for immunofluorescence and four common-type optical microscopes, besides a refrigerated centrifuge and other equipment, are being used in connection with swine fever.

#### Virus Of European Origin

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 1 Aug 78 p 34

Excerpt "There is no doubt that the virus registered in Brazil is that of African swine fever. However, it is occurring in a differentiated form because it does not present a mortality at the rates which have taken place in other countries. As the most accurate theory, we believe that the disease spread to Brazil from Europe because in Portugal, for example, the use of an ineffective vaccine turned it into a chronic disease and reduced its

mortality." The assertion was made yesterday in Concordia, Santa Catarina, by technician Luis Sergio Coelho, director of the National Hog Research Center of the EMBRAPA /expansion unknown/, to clear up from a technical standpoint the allegations of the growers that the virus which prevails in the country is not that of African swine fever.

Luis Sergio Coelho explained that a longer period of observation of the development of the disease in Brazil is still necessary, but from the data already available, "it is possible to confirm the differentiated behavior." In addition to the possibility that the virus spread to the country from areas where it occurred in chronic fashion, the technician said that climatic conditions themselves could induce changes in its effects.

Commenting on the proposal made by the Parana Hog Raisers Association that inasmuch as it is a differentiated virus, less stringent measures be adopted than are used in the case of a high-mortality disease, Luis Sergio Coelho said that the ministry has already been relaxing the measures as compared to those used in European countries, for instance. "While a slaughter of all the animals within a radius of at least 10 kilometers from the focus was carried out in other countries, the slaughter is being done only at the site in Brazil."

8414

CSO: 5400

BRAZIL

UNIDENTIFIED DISEASE STRIKES HORSES IN MATO GROSSO

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 2 Aug 78 p 18

/Text/ Presidente Prudente--A disease which is responsible for the extermination of hundreds of capybaras on the Mato Grosso banks of the Parana River in the past 6 months is now attacking the equine herds and also drawing the attention of the technicians of the Agricultural Division of Presidente Prudente. They fear that the disease will reach the state of Sao Paulo, pointing out Pontal as the most threatened area because it is separated from the foci only by the river.

Last Monday, veterinarian Walter Mengato announced that he was going to contact his colleagues of Presidente Epitacio (Sao Paulo) and Bataguassu (Mato Grosso) to try to uncover the source of the disease. On the basis of the behavior of the afflicted animals, he admits that it could be the so-called "haunches disease," but he was not sure because the reports received at the DIRA /expansion unknown/ were still vague.

Administrator Antonio de Oliveira said that 15 mares and a stallion have died and 2 other animals are stricken in the Porto Novo ranch of the municipio of Anaurilandia alone. The animals, he explained, suddenly stop eating and drinking water, then they become emaciated and drawn up at the haunches, move with great effort and die slowly.

According to Antonio de Oliveira, the same thing occurs with the capybaras, which were attacked before the equines were. Wild animals become docile and can be touched without producing a reaction. Riparian dwellers confirm the statements of the administrator, foreseeing that the whole population of those rodents could be eliminated shortly in the region, where sanitary resources are minimal.

Oliveira also explained that 50 horses died in the past few months on a ranch abutting the Porto Novo ranch. Other witnesses said that large numbers of sick capybaras still continue to show up, but that has not yet attracted the attention of any government officials. Up to now, only a veterinarian of Presidente Venceslau has sought to investigate the disease, but no one knew his name.

According to technician Walter Mengato, there are no reports of dead animals on the Sao Paulo side, but he considers that the disease is a serious threat to "our herds." Boats cross the Parana River every day, some of them carrying hunters, and there are always capybaras among the animals killed in Mato Grosso. As many of them live in Pontal, they could conceivably catch sick animals and take them into the area.

The affected area consists of thickets mingled with pastures and swamps. For the landowners to get there, they have to go to Euclides da Cunha, in the municipio of Teodoro Sampaio, where they get to the river and proceed by boat. They normally leave the vehicles in the city and go the rest of the way on foot or on horseback, because there are no roads.

The first skeletons of dead animals are already beginning to appear on the Mato Grosso side of the river. According to rancher Jose Luiz Conde, this is the first time that this kind of disease has afflicted the animals, and a single stud killed on his property was worth 20,000 cruzeiros. It is estimated that more than 500 capybaras and 100 horses have died in the region in less than a year.

8414  
CSO: 5400

BRAZIL

BRIEFS

HOGS IN PERNAMBUCO STATE--The Agriculture Ministry's regional delegate in Pernambuco has confirmed the appearance of a new African swine fever focus on the Mascarenhas farm in the municipality of Garanhao. As a preventive measure against the spread of this disease, 6,000 hogs will be put to death. [Text] [Sao Paulo Cadeia Verde Amarela in Portuguese 1000 GMT 24 Aug 78 PY]

MINISTER ON SWINE FEVER--Agriculture Minister Alysso Paulinelli stated today in Brasilia that he announced the outbreak of African swine fever in the country only because President Geisel had authorized him to do so. He added that the government took this measure to comply with its commitments with international health organizations. Paulinelli made this statement in reply to a document released by industrialists questioning the existence of African swine fever in the country. He reported that approximately 30,000 hogs have been killed thus far in the country out of the total head of 37 million head. He added that only 2,000 of the hogs killed were affected by the disease. [Text] [Porto Alegre Radio Guaiba in Portuguese 2150 GMT 22 Aug 78 PY]

PARALYTIC RABIES IN BAHIA--Bahia--At least 130 animals have died of paralytic rabies in the last few days. This new focus is attacking cattle in the region of Vitoria da Conquista in the state of Bahia. According to the agriculture cooperative in this city, the number of the dead animals may be larger, since only the association's members have reported on the outbreak. [Text] [Sao Paulo Cadeia Verde Amarela in Portuguese 1000 GMT 22 Aug 78 PY]

SWINE FEVER IN MEXICO--Brasilia, 18 Aug--The official committee for the eradication of swine fever stated today that the disease has reached Mexico and that the Uruguayan Government has implemented measures aimed at preventing the spread of this disease. The swine fever outbreak is very severe in Brazil, where it has been detected in 7 out of 22 states affecting 15 percent of the exports. Hog farmers are facing a severe crisis because domestic consumption in swine-importing countries has dropped 60 percent. [Text] [Buenos Aires TELAM in Spanish 0025 GMT 19 Aug 78 PY]

DOMINICAN REPUBLIC

COMMISSION ORDERS SLAUGHTER OF INFECTED PIGS

Madrid EFE in Spanish 0141 GMT 2 Aug 78 PA

[Text] Santo Domingo, 1 Aug (EFE)--A commission appointed by the Dominican Government today, ordered the slaughter of all pigs infected with African swine fever, which has already spread to at least eight of the country's provinces.

The commission also ordered the slaughtering of pigs kept in private yards or corrals, in view of reports that many backyard breeders had kept their animals, disregarding official instructions designed to prevent the spread of the disease.

The high-level commission authorized the reopening of slaughterhouse and the operation of sausage factories on condition that they comply with all the established sanitary requirements.

To prevent the spread of swine fever, all access roads to infected areas have been quarantined by means of sanitary cordons and control points.

The slaughter of the pigs infected with the disease has affected the domestic market, where the sale of pork, which is the meat most consumed by the middle and lower classes, dropped considerably.

Official reports indicate that the government plans to compensate breeders for the loss of their animals. A fund of 10 million pesos (equal to dollars) has been set up for this purpose, although it is estimated that if all pigs are killed and the virus is eradicated by means of "quarantine," the sum needed would increase to 120 million pesos.

Alarm over the spread of African swine fever has extended to all of the countries in the area. The Costa Rican Agriculture and Livestock Ministry has issued instructions to the border posts as well as air and sea ports, to take the pertinent measures in view of the outbreak of the fever in the Dominican Republic.

CSO: 5400

VACCINES FOR LIVESTOCK PROTECTION DESCRIBED

East Berlin PRESSE-INFORMATIONEN in German No 93, 10 Aug 78 pp 4-5

[Article by Prof Dr Wilfried Heinicke, senior veterinary officer and director of the Dessau Institute for Vaccines]

[Excerpts] The Dessau Institute for Vaccines, GDR Academy of Agricultural Sciences, and its branch offices in Gera, Leipzig, and Rostock bezirks, as well as in Berlin, are constantly providing new high-quality vaccines, serums, diagnostics, and other medicines for livestock.

Modern vaccines must be highly effective, easy to use, and absolutely harmless. The industrial production of animals also requires entirely new application principles. New procedures have been developed which avoid the traditional vaccination by needle, whereby the animals absorb the vaccine in atomized form through the air they breathe or they receive it in their feed or drinking water. For example, today vaccination methods which do not require use of the needle are administered to control swine erysipelas, swine salmonellosis, and Newcastle poultry disease.

In close cooperation with the Jena Institute for Bacterial Epizootics, the Dessau Institute for Vaccines has in recent years developed and made available vaccines to combat diseases which occur in breeding of cattle and hogs; particularly vaccines against diarrhea diseases, which have involved heavy losses and which are caused by salmonellosis and colitis, and also against erysipelas. In part, the highly effective principle of live vaccines is used for this; thus, the vaccine "Suisaloral" is used for swine salmonellosis.

The Dessau Institute is also participating in the development of modern vaccines at the Friedrich-Loeffler Institute for Animal Epidemics, Island of Riems. Live vaccines developed here against Riems hog cholera, Marek's poultry disease, and TGE, an infectious gastroenteritis of hogs, have been of considerable importance to the country.

CSO: 5400

GUATEMALA

BRIEFS

CAMPAIGN AGAINST SWINE FEVER--The agriculture ministry has started a campaign aimed at implementing better control of the country's borders to prevent the entry of pork byproducts and consequently the entry of the African swine fever, which has been already detected in 93 places in Brazil. [Text] [Guatemala City Domestic Service in Spanish 1230 GMT 24 Aug 78 PA]

CSO: 5400

BRAZIL

BRIEFS

COFFEE PLANT ROT DETECTED--Coffee plant rot, a plague which thwarts the growth and development of coffee plants, has been discovered in eastern Bolivia. This plague could affect the normal coffee production in the country. This report was released by (Walter Mur), manager of the Bolivian Coffee Committee, who stated that members of the Cartagena Agreement, experts in the subject, had visited the affected areas in the country. [La Paz Radio Panamericana Network in Spanish 0000 GMT 24 Aug 78 PY]

CSO: 5400

## MASS SPRAYING WILL COMBAT COCOA LOSSES TO CAPSID

Accra DAILY GRAPHIC in English 12 Aug 78 p 16

[Article by C.S. Buabeng]

[Text]

**THE Government has re-introduced mass spraying of cocoa farms in the country in a bid to offset the steep decline in cocoa production.**

Initially, the exercise, which starts this month, will be restricted to all cocoa farms in the Brong Ahafo and Ashanti Regions to enable the Ministry of Cocoa Affairs to assess its success before extending it to the Eastern, Central, Western and Volta Regions.

Mr E. K. Gyasi, Chief Cocoa Officer of the Cocoa Production Division (CPD) of the Ministry announcing this at a press briefing in Accra yesterday, said the farms would be sprayed on credit basis and payments would be made when the farmer sold his produce.

The spraying exercise will be undertaken by 37,000 men of the CPD and farmers would pay C5 for every acre sprayed.

In addition, farmers would be required to weed their farms before spraying starts but if any farmer could not do it, CPD staff would do it for a fee of C15 per acre.

Mr Gyasi said the mass spraying had been re-introduced because it had

been estimated that over 100,000 tonnes of cocoa are lost to capsid every year.

Mr Gyasi said farmers in the Eastern, Central, Western and the Volta Regions would have direct sales of heavily subsidized spraying machines at C30 each and a litre of insecticide at C5 to enable them spray their own farms.

Already, he said, the Government had imported 10,880 spraying machines into the country, while firm orders had been placed for 15,000 more. Each machine is estimated to cost about C264.

In addition, 943,752 litres of insecticide out of

the expected 2,000,000 have already arrived.

Mr Gyasi said the re-introduction of the mass spraying and direct sale of inputs to the farmers would not only check the spread of insect infestation and increase production but would also restrict the smuggling of spraying machines and insecticides across the borders.

VIETNAM

BRIEFS

LONG AN INSECT SCOURGE--By late July, Long An Province, as a whole, suffered more than 25,000 hectares of summer-fall rice and 10th-month rice seedlings damaged by insects. These insects are now spreading and adversely affecting grain production and other economic sectors. Faced with this situation, the Long An Provincial Party Committee and People's Committee have issued a joint directive ordering all sectors and echelons from the district down to the village level to launch an insect eradication drive to stamp out the insect scourge within August 1978. [Ho Chi Minh City Domestic Service in Vietnamese 0500 GMT 11 Aug 78 BK]

CUU LONG INSECT ELIMINATION--About 40,000 hectares out of a total of 78,000 hectares of summer-fall rice crop, 14,141 hectares of 10th-month rice seedlings and 30,000 hectares of blooming 10th-month rice plants are being affected by insects and flies, especially brown flies. In Vung Liem, Cang Long and Long Ho districts, the entire area of rice seedlings and blooming riceplants is affected by flies. With insecticide and other traditional insect-killing means, peasants in the province have saved thousands of hectares during the past 2 months. The Cuu Long provincial agricultural service is striving to provide enough insecticide for peasants to save the remaining rice area. [Ho Chi Minh City Domestic Service in Vietnamese 0500 GMT 21 Aug 78 BK]

CUU LONG INSECT DAMAGE--As many as 30,000 hectares of summer-fall rice were affected by leaf hoppers and tea-seed bugs in Cuu Long Province during the first 10 days of August. [Hanoi Domestic Service in Vietnamese 0400 GMT 17 Aug 78 BK]

CSO: 5400

IRAQI ENGINEERS HELP FIGHT LOCUSTS

Baghdad BAGHDAD OBSERVER in English 16 Jul 78 p 6

[Excerpt]

**In talking about Arab agricultural integration, it will certainly lead us to take into account the mutual experiences among the Arab countries as a first step towards Arab agricultural revival and creation of a developed and unified agricultural situation.**

To this view, one should recall the various aids rendered by Iraq to Arab countries. Thus, it is not surprising that Iraq support this Arab country or that according to it's capability. As an example to be cited is Iraq's effective participation in locusts elimination in the Arab Republic of Yemen, where Mr. Mustafa Allawy Director of Plant Pests Elimination and engineer Abbas Hantosh head of locusts branch have taken part in the organized campaign for eradicating locusts swarms which began invading Yemen.

In a meeting with Mr. Abbas Hantosh about the task of the Iraqi team he said:

"Eight locusts swarms had migrated from west of the Red Sea towards Arab Peninsula, and landed in Saudi Arabia and Yemen.

For this reason, Yemeni Ministry of Agriculture asked for the assistance of the Iraqi Ministry of Agriculture and Agrarian Reform to eradicate the locusts which have widely swarmed over there.

"The Iraqi response was fast, and soon, after our arrival there we set up a joint plan with the Yemeni officials for eradicating locusts that had settled in Tohama field and in the areas of Judaida, Almania, Thurba and Dhuha, and vallies of Husinia and Salam as well as in several other areas."

About the results achieved by the campaign, Mr. Hantosh stated.

"Our work was of two directions. First, we aimed at destruction of locusts eggs that spread all over the farms and

fields. Secondly, the eradication of all the existing locust swarms which continuously multiply due to fast rate of breeding.

"Therefore, it was very necessary to quicken the process of eliminating the locusts as delay meant emergence of new additional swarms. We made a general survey of areas attacked by locusts and succeeded in eradicating those in farms and woods. From there we continued the fight against locusts into the desert in order to prevent them multiplying and invading the neighboring countries."

Mr. Hantosh went on to say: "I was very happy to discharge a nationalist duty in the field of locust eradication. The warm welcome by the Arab people of Yemen clearly reflected the mutual lov among the sons of one nation. The citizens of Yemen told us that they always expect aid from Iraq on various levels."

CONTENTS (Continued)	Page
Hospitals, Medical Centers Receive Assistance, Prosper (Various sources, various dates).....	21
Equipment From Hungary Argentina, Clubs Make Donation, by Hector Sanchez Cuneo Visit Brings Services Expansion, by Guillermo Rego Rocha Has Modern Facilities, by Gaby Martin Cardona Regional Hospital Improvement, by W. Rodriguez Castellussarry	
Medical Graduates: Specializations, Other Factors Reviewed (Lucy Liguera; EL DIA, 9 Jul 78).....	27
Briefs Canelones Vaccination Schedule	31
ANIMAL DISEASES	
INTER-AMERICAN AFFAIRS	
African Swine Fever Continues To Plague Continent (Various sources, various dates).....	32
Eradication Investment, Experts Dispatched Exterminations, Spread to Venezuela Lima Meeting: Continental Endeavor Alarm in Pork Industry Transfer Healthy, Report Detections Eliminate Boars, Later Shipments Businesses Closed Plant Negotiations, Paraguay's Campaign Local Producers Analyze Measures, by Juan Carlos Lema, Danie Rondan	
BOLIVIA	
Efforts Underway To Block Swine Fever Entry (PRESENCIA, 20 Aug 78).....	43
BOTSWANA	
EEC Agrees To Resume Beef Imports (DAILY NEWS, 1, 10 Aug 78).....	44
Small Breakthrough Further Negotiations	

CONTENTS (Continued)	Page
Briefs	
Foot-and-Mouth Epidemic Over	46
British Aid	46
BRAZIL	
Possible Origin of Swine Fever Discussed (Various sources, 30 Jul, 1 Aug 78).....	47
Virus Behavior Raises Doubts	
Virus of European Origin	
Unidentified Disease Strikes Horses in Mato Grosso (O ESTADO DE SAO PAULO, 2 Aug 78).....	50
Briefs	
Hogs in Pernambuco State	52
Minister on Swine Fever	52
Paralytic Rabies in Bahia	52
Swine Fever in Mexico	52
DOMINICAN REPUBLIC	
Commission Orders Slaughter of Infected Pigs (EFE, 2 Aug 78).....	53
EAST GERMANY	
Vaccines for Livestock Protection Described (Wilfried Heinicke; PRESSE-INFORMATIONEN, 10 Aug 78).....	54
GUATEMALA	
Briefs	
Campaign Against Swine Fever	55
PLANT DISEASES AND INSECT PESTS	
BRAZIL	
Briefs	
Coffee Plant Rot Detected	56

CONTENTS (Continued)	Page
 GHANA	
Mass Spraying Will Combat Cocoa Losses to Capsid (C. S. Buabeng; DAILY GRAPHIC, 12 Aug 78).....	57
 VIETNAM	
Briefs	
Long An Insect Scourge	58
Cuu Long Insect Elimination	58
Cuu Long Insect Damage	58
 YEMEN ARAB REPUBLIC	
Iraqi Engineers Help Fight Locusts (BAGHDAD OBSERVER, 16 Jul 78).....	59