
PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

PANAFTOSA



STATUS OF FOOT-AND-MOUTH DISEASE ERADICATION PROGRAMS SOUTH AMERICA, 2000



PAN AMERICAN HEALTH ORGANIZATION
Pan American Sanitary Bureau, Regional Office of the
WORLD HEALTH ORGANIZATION

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STATUS OF FOOT-AND-MOUTH DISEASE ERADICATION PROGRAMS. SOUTH AMERICA, 2000

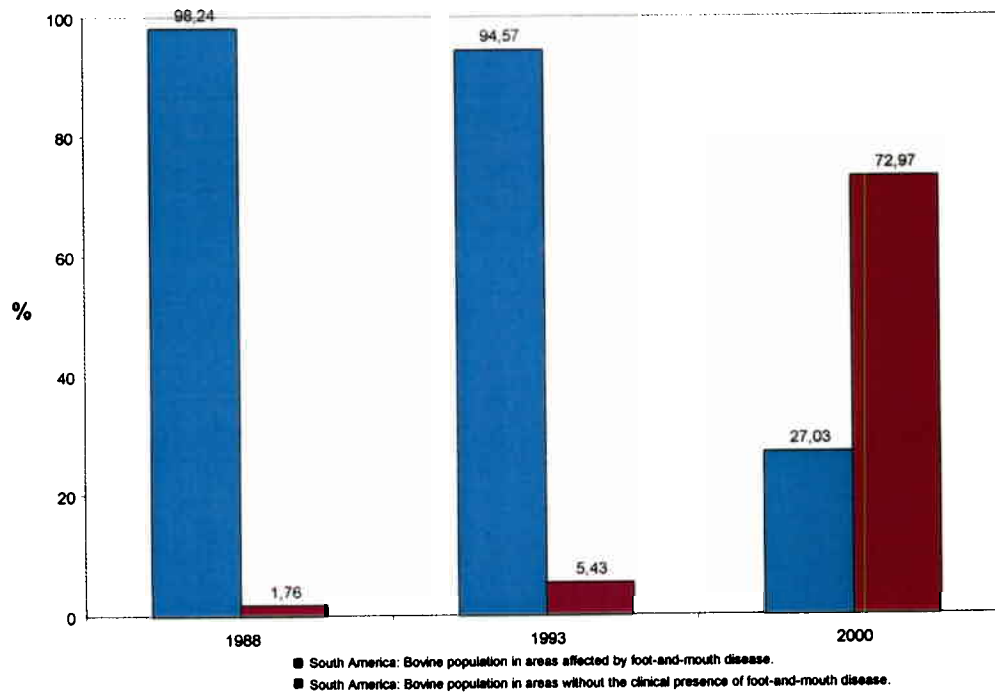
INTRODUCTION

The actions taken by the various National Services resulted, in 2000, in an increase of the area internationally certified as disease-free in South America.

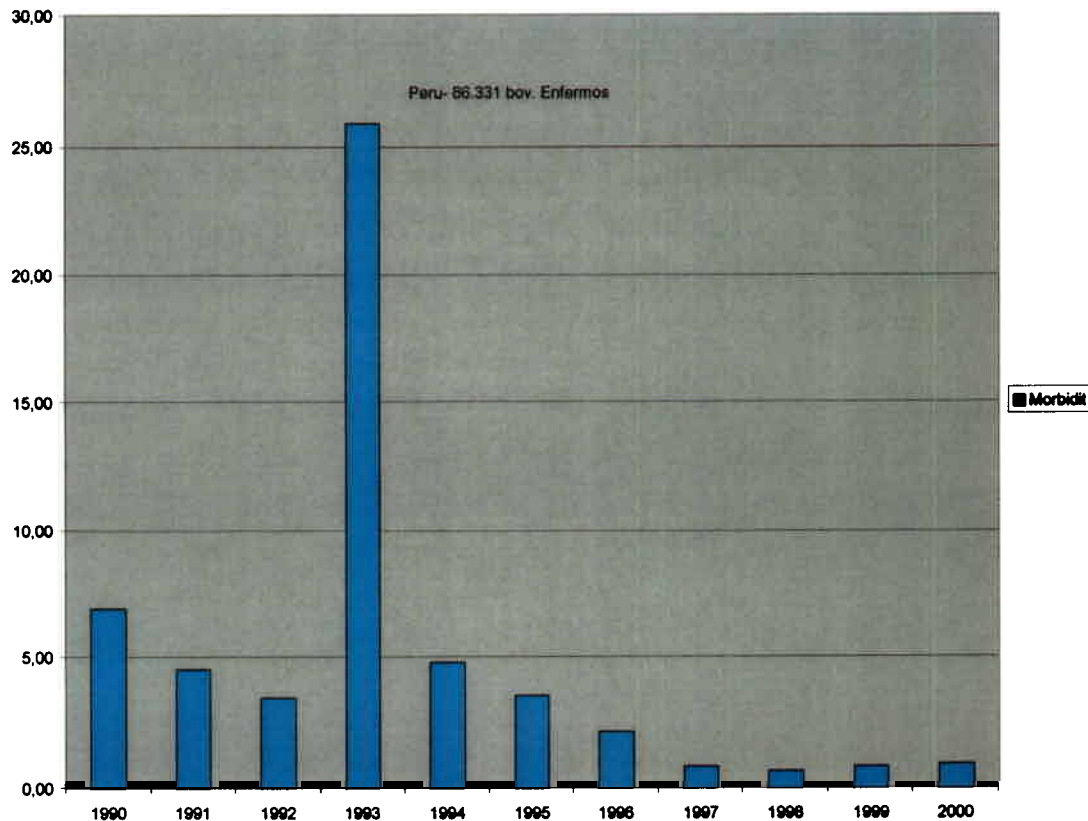
Argentina was certified as a country free of foot-and-mouth disease without vaccination, and an extensive area of west central Brazil was recognized as disease-free with vaccination. In addition, Guyana and other areas of Brazil and Colombia have begun to take the necessary steps to obtain the same certification.

At year's end, there had been no record of the clinical presence of the disease for periods of over two years in almost 73% of the cattle herds on the continent.

FIGURE 1. Distribution of the bovine population by sanitary status of country or area in South America



**FIGURE 2. Morbidity rate in endemic area,
South America, 1990-2000**



At the same time, in the regions where the disease is present, the number of affected herds and the morbidity rate in the various species continue to decline.

This progress was not compromised by the cases of foot-and-mouth disease in Uruguay, southern Brazil, and the vicinity of the disease-free area of Colombia. In all cases mentioned, the emergency operations in each country succeeded in eradicating the outbreaks, and no new cases were recorded.

ARGENTINA

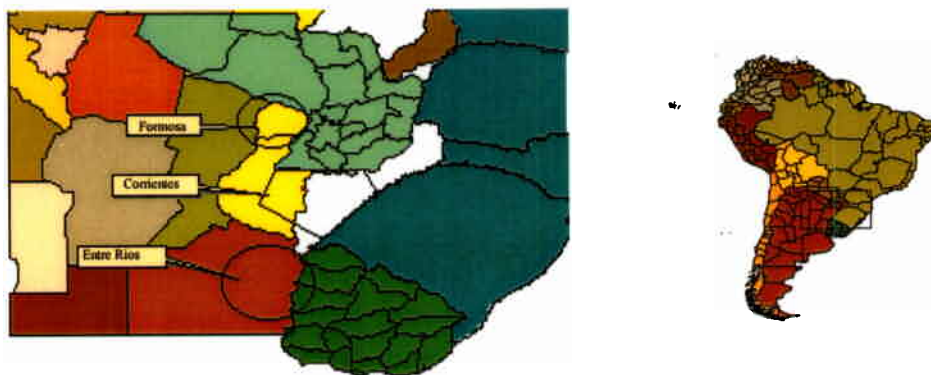
The Republic of Argentina, after achieving international certification as a country free of foot-and-mouth disease without vaccination, had to deal with a health emergency as a result of herds illegally entering the country from the Republic of Paraguay. When positive serology was found

in livestock located in a shared field in the Department of Pilcomayo, Province of Formosa, the mechanisms in place to control this type of situation were triggered.

Although they did not present clinical signs of foot-and-mouth disease, the animals were isolated, blood samples were taken, pharyngeal and esophageal fluids extracted, and the animals destroyed.

One of the samples was PROBANG positive, with a type A₂₄ virus having been isolated. An emergency was declared and departures from that property were investigated to determine possible ramifications. As a consequence, positive serology for foot-and-mouth disease was identified in the departments of Mercedes, Province of Corrientes, and in Uruguay, Province of Entre Ríos.

MAP 1. Region involved in the sanitary emergency in Argentina



The establishments involved were isolated. Some 1,308 animals were slaughtered in Formosa, 1,546 in Corrientes, and 709 in Entre Ríos. Surveillance areas were established in the three aforementioned areas, including the entire province of Formosa, in more of half of the establishments in Corrientes, and in 25% of all properties in Entre Ríos. Livestock were barred from leaving the surveillance areas, and all livestock movements were controlled.

In addition to these actions, and as a regular part of the country's active epidemiological surveillance system, 599 establishments were visited when symptoms of vesicular disease were reported. All were ruled out. Furthermore, 240,016 samples of bovine serum, all EITB negative, were analyzed.

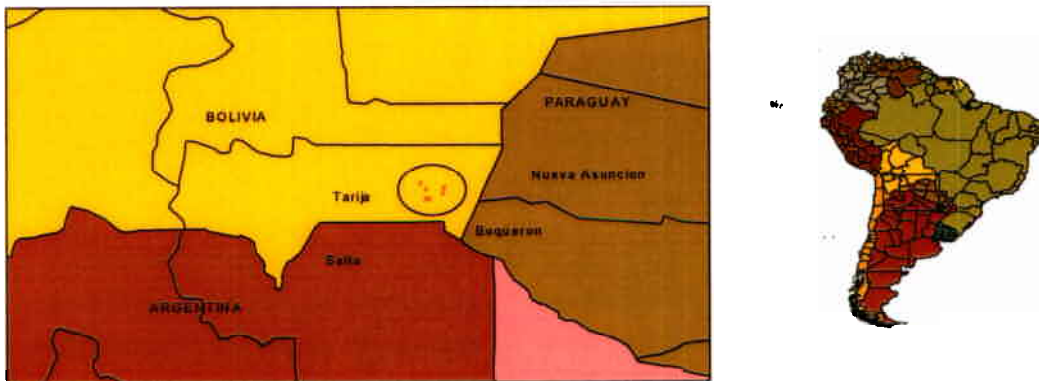
BOLIVIA

Geographically, Bolivia is divided into three regions, the altiplano, the valleys, and the flatlands. In the altiplano, except for La Paz, which reported an outbreak in the municipal slaughterhouse in 1999, there is no record of an outbreak of foot-and-mouth disease since 1995. However, this positive situation is extremely precarious because of the poor control over the movement of livestock from other areas of the country, especially El Beni.

The majority of cases of foot-and-mouth disease continue to be located in the flatlands, which account for 82% of all outbreaks in the country. The main problems are the lack of an adequate system to properly deal with outbreaks in El Beni and the delay by producers in Santa Cruz in reporting suspected outbreaks.

In the valleys, Cochabamba again suffered two outbreaks of foot-and-mouth disease, and in mid-October, an outbreak of foot-and-mouth disease was recorded in the department of Tarija, which borders Argentina and Paraguay in southern Bolivia and has traditionally been untouched by the disease.

MAP 2. Southern Bolivia, border with Paraguay and Argentina



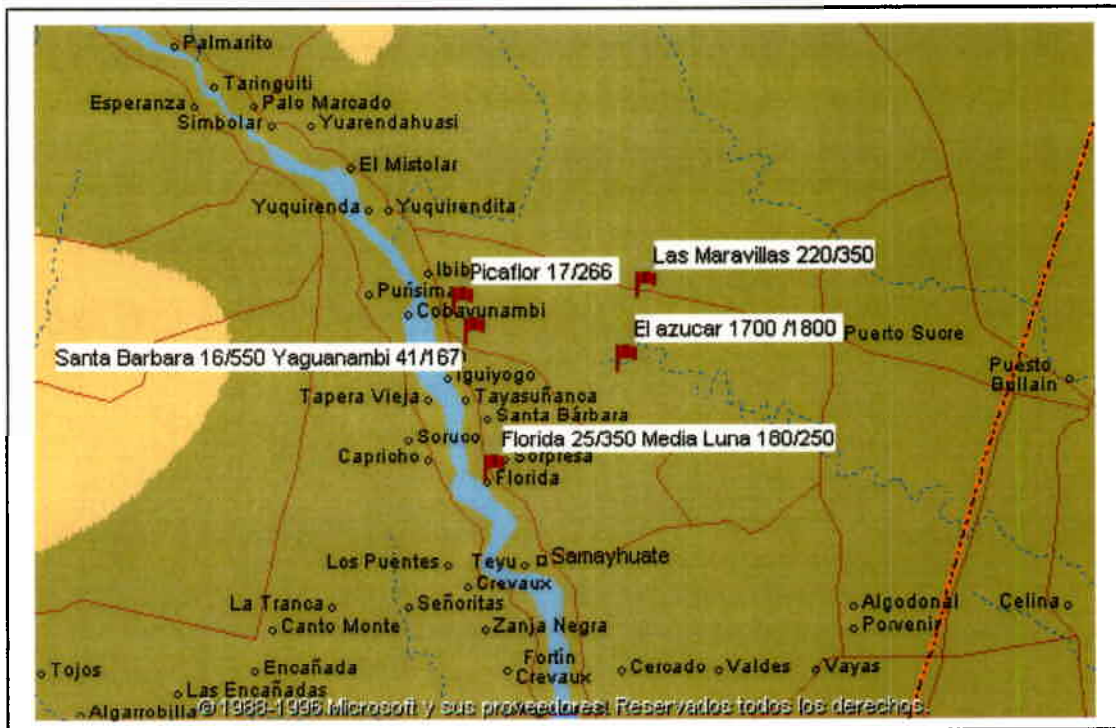
The initial outbreak occurred around October 15 in the Province of Gran Chaco, Department of Tarija, and was confirmed by the LIDIVET laboratory as positive for the "O₁" virus using the ELISA technique.

Vaccination coverage in the area is low or nil as a result of previous unsystematic campaigns, the delay in starting the year 2000 campaign, and the fact that there is no effective control of the movement of livestock. All these factors have contributed to the spread of the disease.

A sanitary emergency was declared for the entire province of Gran Chaco, with the affected area being restricted. Livestock movement checkpoints were established and coordinated with the army and the regional police, with compulsory quarantine for livestock in the area and vaccination and revaccination of the herds in the perifocal area.

There were 13 outbreaks in the province of Gran Chaco, affecting a population of 4,810 animals, with 2,819 animals contracting the disease and 284 dying.

MAP 3. Focal area – establishment: disease/total bovine population, Southern Bolivia



BRAZIL

In 2000, five more states were certified as totally or partially free of foot-and-mouth disease with vaccination. The number of cases of foot-and-mouth disease continues to decline throughout the country. Although 47 episodes of the disease were diagnosed, in contrast to 37 the previous year, an outbreak in the disease-free area, which included 22 small properties, should be taken into account.

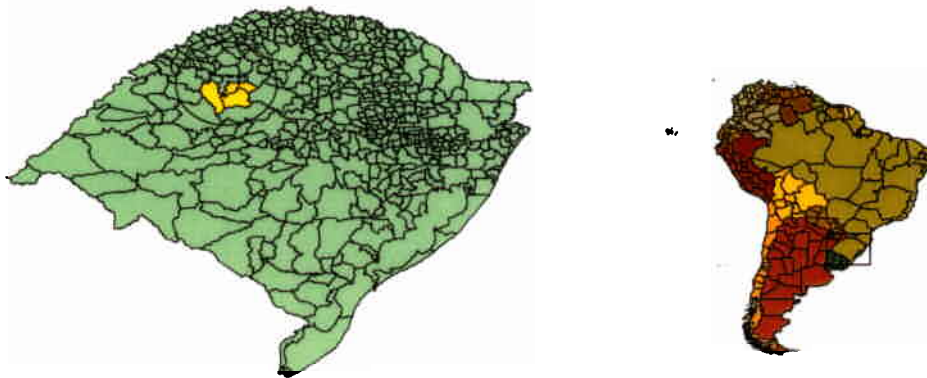
Thus, episodes of foot-and-mouth disease in the area where the disease is still present fell from 37 to 25, or more than 30%. In terms of land area, 21 of the 27 units of the federation have had

no recorded cases of foot-and-mouth disease for more than a year. This represents more than 60% of the territory and 90% of the national bovine population. Moreover, the percentage of cases in which material is collected for laboratory diagnosis remains high. The percentage is below 100% only in the northeastern states.

The aforementioned outbreak was located in a nucleus of four municipios in the state of Rio Grande do Sul in an area consisting of small properties, and the causative agent was identified as the type "O" virus.

The episode began in August, and the affected farms, their neighbors, and other related areas were quarantined. This involved a total of 1,719 properties with 58,190 head of cattle, 14,566 sheep, 7,972 pigs, and 198 goats.

MAP 4. Region effected by foot-and-mouth disease, Rio Grande do Sul, Brasil



The sanitary slaughter of diseased animals and animals with which they had come in contact resulted in the destruction of 8,185 head of cattle, 722 sheep, 2,106 pigs, and 4 goats. In addition, serologic sampling was performed on 1,078 properties. The funds invested came to \$2,950,000 for indemnification and \$1,150,000 for operating expenses.

Brazil applied to the IOE for certification of the eastern circuit and the state of Mato Grosso do Sul as areas free of foot-and-mouth disease with vaccination.

CHILE

Chile has been free of foot-and-mouth disease since 1981, having eradicated an outbreak in 1987. All the activities planned for the epidemiological surveillance program for exotic diseases are ongoing.

Although the process is not completely finished, Chile was accepted and included as a member of the Project for Eradication of Foot-and-Mouth Disease in the River Plate Basin, having increased its participation at the regional level.

COLOMBIA

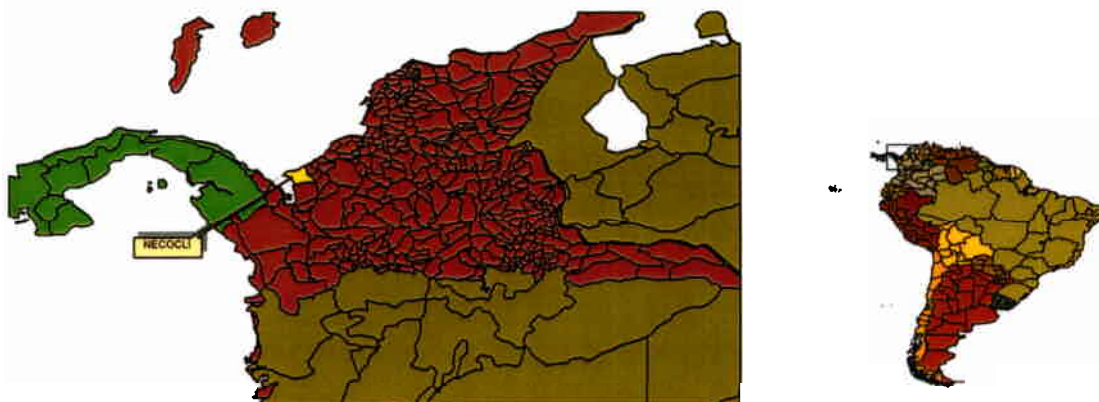
Foot-and-mouth disease, which historically could be found throughout Colombia, is now virtually confined to the department of Nariño on the Ecuadorian border. During the year 2000 the downward trend in the number of outbreaks continued, as did the prevalence of the type O virus as the cause of the outbreaks, being responsible for 37 of the 39 episodes.

The reverse is true for vesicular stomatitis, which remains on the rise. Some 556 outbreaks occurred, compared to 468 the previous year. The Indiana virus is responsible for the number of outbreaks, which increased from 50 in 1999 to 182 in 2000.

Colombia has maintained a high rate of vaccination for foot-and-mouth disease, covering 85% of the nation's cattle in 2000. It has also succeeded in maintaining the increase in the percentage of suspected cases investigated, with collection of material for laboratory diagnosis occurring in 82% of cases, up from 74%. This increase should be stressed, since it is largely the result of a willingness to participate on the part of the livestock producers, who report suspected cases more quickly.

Two outbreaks occurred in connection with the Atlantic Coast Project: one in the south of the department of Bolivar and the other in the municipio of Necoclí, confirming the periodic appearance of cases in this region, where vaccination was abandoned in 1985. The affected ranch had 601 head of cattle, and 20 contracted the disease.

MAP 5. Atlantic Coast of Colombia and focal region in Necoclí-Uraba, Antioquia



Some 64 animals were slaughtered on the affected ranch, along with others with which they had come into contact. Blood samples were taken from the other animals on the property, and all were ELISA 3ABC, and EITB negative, except for three animals, which were also slaughtered.

**MAP 6. Location of the outbreak in Necocli-Uraba,
Antioquia, Colombia**



The establishment was disinfected and isolated, and focal and perifocal vaccination of 75,000 head of cattle was carried out. The active virus was identified as type O₁ using complement fixation tests.

Epidemiological research showed that the outbreak was the result of the introduction of infected animals from the endemic area.

Serologic sampling was performed in the Atlantic Coast area to prove the absence of viral activity for foot-and-mouth disease. Some 8547 animals were tested, with only 4 being ELISA and 3ABC–EITB positive. These results were submitted to the International Office of Epizootics, and the aforementioned area obtained international certification.

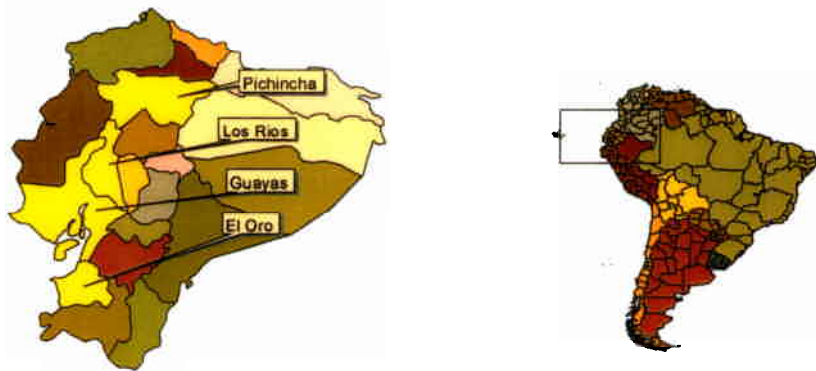
ECUADOR

The situation in Ecuador is similar to that of the previous year, both with regard to foot-and-mouth disease and vesicular stomatitis, but with a slight increase.

Despite the efforts made, vaccination coverage has not exceeded 50%. This is a serious obstacle to greater achievements in combating the disease, as are the low percentage of suspected cases reported by owners and the long lapse between the time the outbreaks begin and action is taken.

The vesicular stomatitis situation is almost the same as in the previous year, in terms of both number and distribution. In addition, cases of foot-and-mouth disease are concentrated mainly toward the coast, with the largest number of outbreaks occurring in the Province of Pichincha, for both the type O and type A virus, followed by Guayas, Los Ríos, and El Oro.

MAP 7. Ecuadorian Province most affected by foot-and-mouth disease

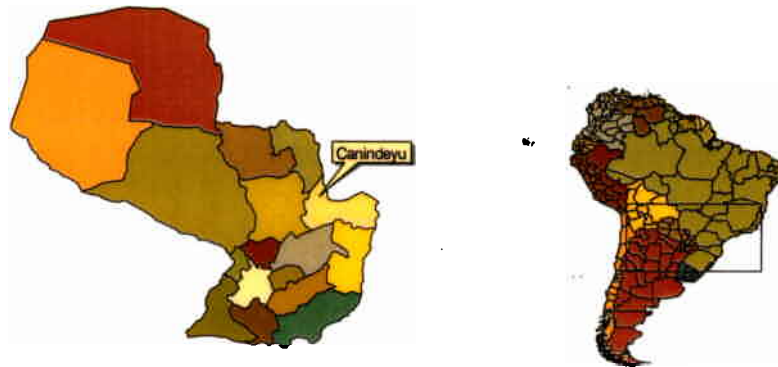


PARAGUAY

Paraguay has been recognized as a country free of foot-and-mouth disease with vaccination since 1997, and it planned to suspend vaccinations on 1 August 2000.

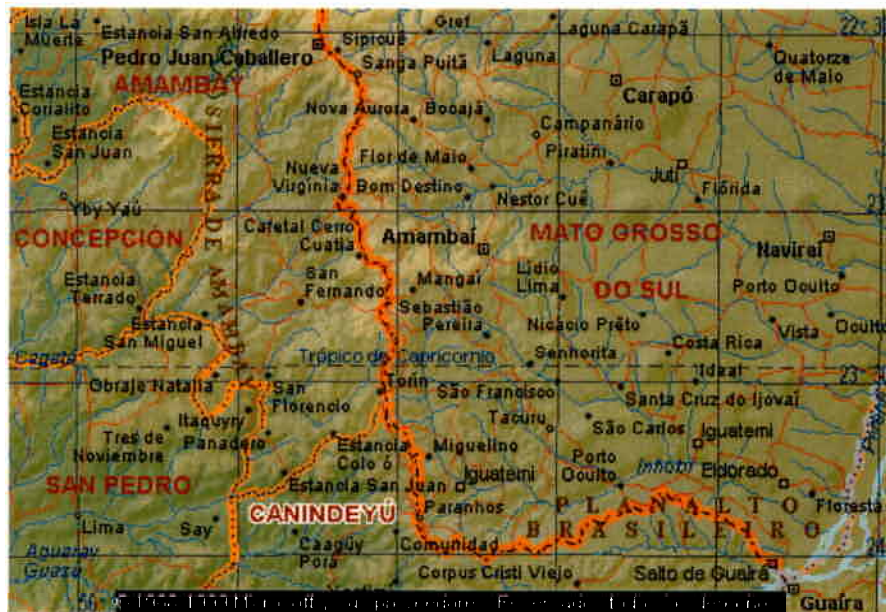
In early October, in the district of Corpus Christi, Department of Canindeyú, a report was received of animals with lesions compatible with foot-and-mouth disease in an establishment very close to the border with the Brazilian state of Mato Grosso do Sul. Upon clinical examination, 5 of the 27 animals involved had lesions that were already healed, so samples of serum and pharyngeal oesophageal fluid (OPLF) smears were taken. Three of the collected serum samples reacted positively to the EITB test, while all samples of pharyngeal esophageal fluid were negative after 3 passes. It is interesting to note that more than 20% of the serum samples were IBR positive.

MAP 8. Department of Canindeyu



Serum samples were taken from cattle in the farm's other fields, as well as from the animals of 19 other establishments in the area. All 1,750 were negative for foot-and-mouth disease, while 3% were IBR positive.

MAP 9. Region involved in the identification of animals with lesions compatible with foot-and-mouth disease in Paraguay



The 27 animals were slaughtered and buried and the area was quarantined for 60 days. As part of its active epidemiological surveillance program, National Animal Health Services of Paraguay analyzed 57,492 samples of bovine serum using the VIA test, and 1,013 were positive; 16,569 serum samples were analyzed using the EITB test (only the 3 already spotted were positive);

and finally, 2,400 samples of nonstructural proteins serum were analyzed using an ELISA test. All negative as well.

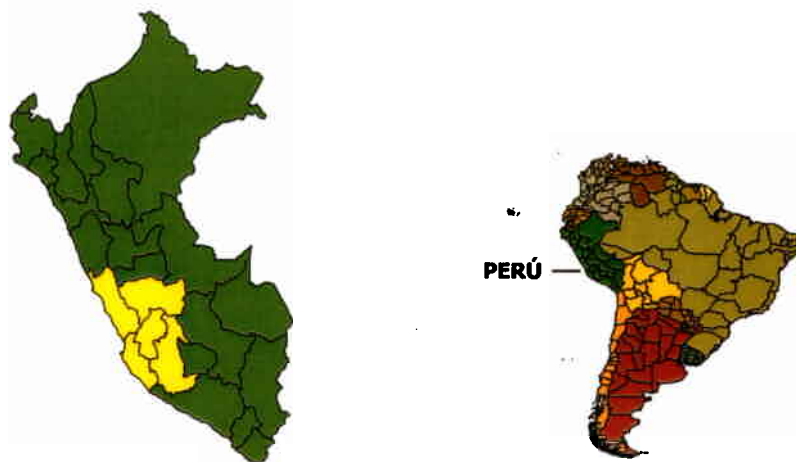
In September, given the general sanitary situation in the region, SENACSA ordered strategic vaccination in the border areas and subsequently determined that vaccinations should be conducted nationwide in 2001-2003.

PERU

In 2000, cases of foot-and-mouth disease were observed in 52 establishments. These are the highest numbers in the past 10 years. The epidemic affected five of Peru's 24 departments, starting in Lima and reaching Junín, Huancavélica, Ica, and Ayacucho. The cause was identified as virus A₂₄.

In the department of Lima there is an area devoted to the intensive confinement of livestock for fattening that receives animals from various points of origin, both from other parts of Peru and from the northern border region, the illegal entry of livestock is common.

MAP 10. Region involved in the foot-and-mouth disease Epidemic in Peru



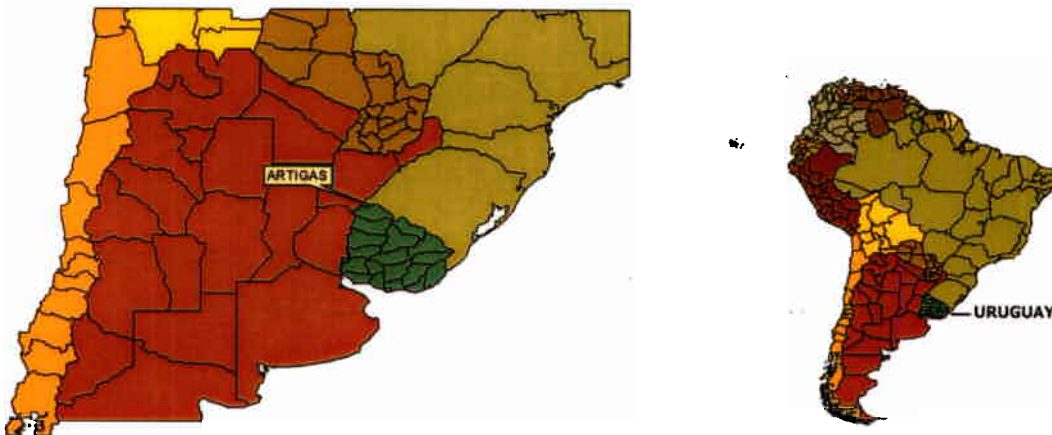
Regarding the introduction of foot-and-mouth disease virus into regions that had not previously employed vaccination, SENASA ordered the slaughter of the diseased pigs, the quarantine of the affected areas, the focal and perifocal vaccination of cattle and pigs, control of the movement of susceptible animals, and the disinfection or incineration of the materials with which they came in contact.

The percentage of cases handled without collecting samples for shipment to the laboratory was much higher than in previous years, although the percentage of samples submitted for laboratory diagnosis remains high, with just 18% involving inappropriate material.

URUGUAY

Health authorities confirmed an outbreak of foot-and-mouth disease in the department of Artigas. The episode presumably began on 15 October and affected the animals on a plot of land shared by three owners, located near the border with Brazil and devoted to the fattening of beef cattle.

MAP 11. Location of the 3 confirmed outbreaks in Artigas, Uruguay



The first animal to contract the disease was a female pig. The establishment's cattle were affected next. The animal population involved consisted of 64 head of cattle and 11 pigs, and 50% of the cattle and 100% of the pigs presented lesions compatible with foot-and-mouth disease. PANAFTOSA confirmed the active agent as the type O₁ virus.

In the affected area, small properties devoted to milk production predominate. At the time of the outbreak, restrictions on livestock movement had already been imposed in the affected area as a result of the prevention and protection measures ordered with the discovery of foot-and-mouth disease in the state of Rio Grande do Sul, Brazil.

On October 24, the Uruguayan Services initiated the slaughter of all the establishment's susceptible animals, and on the following day, it initiated the slaughter of all animals linked to the case. A total of 20,406 animals were slaughtered and buried. The area depopulated of animals susceptible to foot-and-mouth disease was disinfected; subsequently, sentinel animals were introduced to the depopulated area.

MAP 12. Focal, perifocal, and surveillance areas and location of Control points, Artigas, Uruguay



- ◆ Control Points – Focal Area – Ministry of the Interior – Animal Health
- Control Points – Perifocal Area - Ministry of the Interior – Animal Health
- ▲ Control Points – Surveillance Area, Ministry of Defense – Animal Health
- ▲ Installed Departmental Closure Points – Ministry of Defense
- △ Departmental Closure Points to be Installed if Necessary - Ministry of Defense

Screening in the perifocal area involved 309 properties covering 80,193 hectares with a total of 32,963 head of cattle, 120,178 sheep, and 1,422 pigs. A total of 436 people participated. Indemnification in the amount of US\$ 2,084,000 was paid to 218 producers who owned the slaughtered animals.

VENEZUELA

The country is in the first stage of foot-and-mouth disease eradication, which involves eliminating the clinical presence of the disease. This demands high vaccination coverage, control of movement, and prompt attention to outbreaks to keep the disease from spreading.

In this regard, the levels of vaccination coverage have increased from 63% to 87% in the past five years. The number of doses of foot-and-mouth disease vaccine administered increased from 9,000,000 over the course of a year to 20,000,000 in two 60-day periods each year, giving the much better herd immunity.

Efforts were regionalized by livestock circuits, on the basis of the states' production systems and the principal livestock movements, while risk assessment was used to identify farms requiring special attention.

Training of the human resources involved in the program has been intense. International coordination of coverage of the respective national programs in the border areas with Brazil, Guyana, and especially with Colombia, was improved.

The fact that only 20% of the cases attended were confirmed by laboratory, even though samples were taken in 84% of cases, is troubling. Review of the procedures for obtaining, preserving, and shipping materials is necessary.

Foot-and-mouth disease was positively diagnosed in three states, although it is difficult to assess the distribution of foot-and-mouth disease in Venezuela as a result of the aforementioned circumstance.

MAP 13. States com laboratory results for foot-and-mouth disease, Venezuela



Table 1. Establishments checked because of suspected vesicular disease or compatible syndromes. South America, 2000.

| Country | Establishments checked | Clinical diagnosis only | Collection of material Cases % | Laboratory diagnosis Cases % | Foot-and-mouth | | | Vesicular Stomatitis | | | Differential | | | Other Diagnoses | Negative Diagnoses | Material unsuitable |
|--------------------------------------|------------------------|-------------------------|--------------------------------|------------------------------|----------------|-------------|-----------|----------------------|----------|------------|--------------|------------|----------|-----------------|--------------------|---------------------|
| | | | | | "O" | "A" | "C" | NJ | IN | IBR | LA | DVB | | | | |
| Region with Foot-and-mouth | | | | | | | | | | | | | | | | |
| Bolivia | 48 | 15 | 33 | 68,8 | 25 | 52,1 | 7 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Affected Brazil | 94 | 9 | 85 | 90,4 | 85 | 90,4 | 6 | 6 | 0 | 0 | 25 | 0 | 0 | 4 | 44 | 0 |
| Colombia | 934 | 185 | 749 | 80,2 | 746 | 79,9 | 37 | 1 | 0 | 3/4 | 182 | 0 | 0 | 152 | 0 | 3 |
| Ecuador | 60 | 0 | 43 | 71,7 | 35 | 58,3 | 11 | 8 | 0 | 5 | 4 | 0 | 0 | 0 | 0 | 7 |
| Peru | 274 | 163 | 111 | 40,5 | 82 | 29,9 | 0 | 48 | 0 | 8 | 22 | 0 | 0 | 4 | 0 | 29 |
| Venezuela | 143 | 23 | 120 | 83,9 | 75 | 52,4 | 0 | 4 | 0 | 20 | 6 | 1 | 0 | 44 | 0 | 0 |
| Region free of foot-and-mouth | | | | | | | | | | | | | | | | |
| Argentina | 599 | 385 | 214 | 35,7 | 214 | 35,7 | 0 | 0 | 0 | 0 | 0 | 186 | 0 | 385 | 0 | 0 |
| Free Brazil* | 59 | 15 | 44 | 74,6 | 44 | 74,6 | 6 | 0 | 0 | 0 | 10 | 3 | 0 | 1 | 12 | 0 |
| Chile | 39 | 0 | 39 | 100,0 | 39 | 100,0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 |
| Guyana | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Paraguay | 64 | 39 | 25 | 39,1 | 25 | 39,1 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 20 | 0 | 0 |
| Uruguay | 45 | 0 | 45 | 100,0 | 45 | 100,0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 37 | 0 | 0 |
| Total | 2.359 | 834 | 1.508 | 63,9 | 1.415 | 60,0 | 70 | 85 | 0 | 407 | 249 | 196 | 0 | 657 | 56 | 47 |

* South and west central circuits (except Mato Grosso do Sul).
... No information.

Table 2. Diagnoses of foot-and-mouth by type of virus, country, and year. South America, 1990 - 2000

| Country\Year | Virus | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|-----------------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Region with foot-and-mouth | | | | | | | | | | | | |
| Bolivia | O | 13 | 2 | 18 | 10 | 24 | 17 | 7 | 4 | 1 | 2 | 7 |
| | A | 4 | 2 | 0 | 5 | 3 | 19 | 1 | 4 | 6 | 18 | 18 |
| | C | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brazil | O | 43 | 38 | 158 | 115 | 304 | 83 | 9 | 19 | 5 | 13 | 12 |
| | A | 43 | 18 | 72 | 182 | 150 | 99 | 18 | 5 | 1 | 2 | 6 |
| | C | 91 | 64 | 6 | 1 | 9 | 3 | 0 | 0 | 0 | 0 | 0 |
| Colombia | O | 83 | 74 | 226 | 137 | 361 | 144 | 25 | 19 | 92 | 49 | 37 |
| | A | 250 | 113 | 82 | 33 | 40 | 79 | 81 | 17 | 11 | 8 | 1 |
| | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ecuador | O | 29 | 19 | 30 | 26 | 23 | 32 | 17 | 30 | 67 | 17 | 11 |
| | A | 5 | 5 | 0 | 0 | 0 | 0 | 5 | 34 | 14 | 2 | 8 |
| | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peru | O | 32 | 2 | 12 | 44 | 24 | 3 | 10 | 4 | 0 | 0 | 0 |
| | A | 0 | 0 | 3 | 1 | 0 | 0 | 15 | 0 | 0 | 15 | 48 |
| | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Venezuela | O | 3 | 6 | 1 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 |
| | A | 16 | 16 | 7 | 3 | 5 | 3 | 1 | 1 | 17 | 4 | 4 |
| | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Free region | | | | | | | | | | | | |
| Argentina | O | 196 | 37 | 108 | 78 | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
| | A | 115 | 60 | 72 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | 5 | 2 | 39 | 50 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chile | O | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Guyana | O | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ... |
| | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ... |
| | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ... |
| Paraguay | O | 2 | 27 | 23 | 12 | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Uruguay | O | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| | A | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | C | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 3. Monthly distribution of establishments with cases of FOOT-AND-MOUTH DISEASE, by country
South America, 2000

| Country / Mo. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total |
|---------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|------------|
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bolivia | 11 | 8 | 2 | 5 | 11 | 18 | 11 | 3 | 2 | 1 | 2 | 12 | 86 |
| Brazil | 1 | 0 | 0 | 2 | 0 | 2 | 4 | 25 | 8 | 5 | 0 | 0 | 47 |
| Colombia | 0 | 2 | 5 | 1 | 7 | 0 | 4 | 14 | 1 | 2 | 1 | 2 | 39 |
| Ecuador | 1 | 0 | 1 | 1 | 3 | 0 | 0 | 4 | 2 | 3 | 3 | 1 | 19 |
| Paraguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peru | 1 | 2 | 6 | 0 | 0 | 1 | 2 | 1 | 28 | 11 | 0 | 0 | 52 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| Venezuela | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 4 |
| Total | 14 | 13 | 14 | 9 | 21 | 21 | 21 | 47 | 41 | 25 | 8 | 16 | 250 |

Table 4. Monthly distribution of establishments affected by foot-and-mouth disease virus "O," by country.
South America, 2000.

| Country / Mo. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------|
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bolivia | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 7 |
| Brazil | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 6 | 2 | 1 | 0 | 0 | 12 |
| Colombia | 0 | 2 | 5 | 1 | 7 | 0 | 4 | 13 | 1 | 2 | 0 | 2 | 37 |
| Ecuador | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 2 | 3 | 1 | 11 |
| Paraguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| Venezuela | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 2 | 7 | 4 | 10 | 1 | 5 | 20 | 3 | 8 | 4 | 6 | 70 |

Table 5. Monthly distribution of establishments affected by foot-and-mouth disease virus "A," by country. South America, 2000.

| Country / Mo. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------|
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bolivia | 2 | 2 | 2 | 0 | 0 | 3 | 4 | 2 | 1 | 0 | 0 | 2 | 18 |
| Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 6 |
| Colombia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Ecuador | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 2 | 1 | 0 | 0 | 8 |
| Paraguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peru | 1 | 2 | 6 | 0 | 0 | 1 | 2 | 1 | 28 | 7 | 0 | 0 | 48 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Venezuela | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 4 |
| Total | 4 | 5 | 8 | 0 | 1 | 4 | 7 | 11 | 32 | 8 | 2 | 3 | 85 |

... No data.

Table 6. Monthly distribution of properties affected by foot-and-mouth disease virus "C," by country.

South America, 2000.

| Country / Mo. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total |
|---------------|---|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------|
| | NO RECORDED CASES OF FOOT-AND-MOUTH DISEASE VIRUS "C" | | | | | | | | | | | | |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 7. Monthly distribution of establishments affected by vesicular stomatitis-New Jersey virus, by country.

South America, 2000.

| Country / Mo. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------|
| Colombia | 61 | 52 | 37 | 19 | 19 | 20 | 27 | 11 | 14 | 18 | 48 | 48 | 374 |
| Ecuador | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 5 |
| Peru | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 8 |
| Venezuela | 1 | 1 | 2 | 1 | 2 | 0 | 0 | 0 | 4 | 6 | 3 | 0 | 20 |
| Total | 66 | 55 | 41 | 20 | 21 | 21 | 27 | 11 | 19 | 25 | 51 | 50 | 407 |

Table 8. Monthly distribution of establishments affected by vesicular stomatitis-Indiana virus, by country.

South America, 2000.

| Country / Mo. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------|
| Brazil | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 12 | 12 | 7 | 0 | 35 |
| Colombia | 8 | 11 | 26 | 18 | 19 | 21 | 11 | 12 | 14 | 6 | 24 | 12 | 182 |
| Ecuador | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 4 |
| Peru | 1 | 1 | 1 | 1 | 5 | 2 | 3 | 1 | 4 | 0 | 2 | 1 | 22 |
| Venezuela | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 6 |
| Total | 14 | 12 | 29 | 20 | 24 | 23 | 14 | 16 | 32 | 19 | 33 | 13 | 249 |

Table 9. Morbidity and mortality from vesicular disease in cattle. South America, 2000.

| Countries | Herds | | Population | | | Rates | | | | |
|---------------------------------|------------------|------------|--------------------|-------------------|---------------|------------|----------------------|--------------------|-------------|---------------|
| | Total | Affected | Total | In affected herds | Diseased | Dead | Affected herds /1000 | Morbidity / 10,000 | Attack /100 | Fatality /100 |
| Area with foot-and-mouth | | | | | | | | | | |
| Bolivia | ... | 86 | 5,303,709 | 32,654 | 4,124 | 288 | ... | 7,78 | 12,63 | 6,98 |
| Affected Brazil | 1,048,247 | 25 | 78,714,022 | 10,591 | 680 | 19 | 0,02 | 0,09 | 6,42 | 2,79 |
| Colombia | 474,500 | 39 | 20,064,059 | 1,182 | 182 | 2 | 0,08 | 0,09 | 15,40 | 1,10 |
| Ecuador | 251,445 | 19 | 5,630,545 | 7,577 | 1,387 | 0 | 0,08 | 2,46 | 18,31 | 0,00 |
| Peru | 855,701 | 52 | 4,903,363 | 10,146 | 1,045 | 25 | 0,06 | 2,13 | 10,30 | 2,39 |
| Venezuela | 86,823 | 143 | 11,768,899 | 55,892 | 4,263 | 14 | 1,65 | 3,62 | 7,63 | 0,33 |
| Partial | 2,716,716 | 364 | 126,384,597 | 118,042 | 11,681 | 348 | 0,13 | 0,92 | 9,90 | 2,98 |
| Free area | | | | | | | | | | |
| Argentina | 356,191 | 0 | 50,124,545 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 | 0,00 |
| Free Brazil * | 1,277,091 | 22 | 87,158,032 | 2,449 | 109 | 0 | 0,02 | 0,01 | 4,45 | 0,00 |
| Chile | 160,218 | 0 | 4,098,438 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 | 0,00 |
| Guyana | ... | 0 | ... | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 | 0,00 |
| Paraguay | 229,478 | 0 | 9,144,570 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 | 0,00 |
| Uruguay | 68,361 | 3 | 10,133,131 | 64 | 29 | 0 | 0,04 | 0,03 | 45,31 | 0,00 |
| Partial | 2,091,339 | 25 | 160,658,716 | 2,513 | 138 | 0 | 0,01 | 0,01 | 5,49 | 0,00 |
| Total | 4,808,055 | 389 | 287,043,313 | 120,555 | 11,819 | 348 | 0,08 | 0,41 | 9,80 | 2,94 |

* South and West central circulis (except Mato Grosso do Sul).
... No data.

Table 10. Morbidity and mortality from vesicular disease in pigs. South America, 2000.

| Countries | Total | Population | | Dead | Morbidity / 10,000 | Rates Attack / 100 | Fatality / 100 |
|-----------------------------------|-------------------|-------------------|------------|------------|--------------------|--------------------|----------------|
| | | In affected herds | Diseased | | | | |
| Region with foot-and-mouth | | | | | | | |
| Bolivia | 1.706.782 | 1.269 | 402 | 84 | 2,36 | 31,68 | 0,00 |
| Affected Brazil | 10.287.478 | 191 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Colombia | 2.258.120 | 1.947 | 171 | 2 | 0,76 | 8,78 | 1,17 |
| Ecuador | 2.620.000 | 15 | 3 | 0 | 0,01 | 20,00 | 0,00 |
| Peru | 2.787.533 | 402 | 10 | 10 | 0,04 | 2,49 | 100,00 |
| Venezuela | 1.702.149 | 1.065 | 74 | 4 | 0,43 | 6,95 | 5,41 |
| <i>Partial</i> | 21.362.062 | 4.889 | 660 | 100 | 0,31 | 13,50 | 15,15 |
| Disease-free region | | | | | | | |
| Argentina | 2.242.458 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Disease-free Brazil | 20.254.130 | 146 | 18 | 0 | 0,01 | 12,33 | 0,00 |
| Chile | 1.716.881 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Guyana | ... | ... | ... | ... | ... | ... | ... |
| Paraguay | 1.763.564 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Uruguay | 226.279 | 11 | 11 | 7 | 0,49 | 100,00 | 63,64 |
| <i>Partial</i> | 26.203.312 | 157 | 29 | 7 | 0,01 | 18,47 | 24,14 |
| Total | 47.565.374 | 5.046 | 689 | 107 | 0,14 | 13,65 | 15,53 |

* South and west central circuits (except Mato Grosso do Sul).
... No data.

Table 11. Morbidity and mortality from vesicular disease in sheep. South America, 2000.

| Countries | Total | In affected flocks | Population Diseased | Dead | Morbidity / 10,000 | Rates Attack /100 | Fatality /100 |
|-----------------------------------|------------|--------------------|---------------------|------|--------------------|-------------------|---------------|
| Region with foot-and-mouth | | | | | | | |
| Bolivia | 8.215.746 | 529 | 133 | 0 | 0,16 | 0,00 | 0,00 |
| Affected Brazil | 8.170.241 | 376 | 55 | 5 | 0,07 | 14,63 | 9,09 |
| Colombia | 927.390 | 5 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Ecuador | 1.692.000 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Peru | 14.296.717 | 21.447 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Venezuela | 776.654 | 1.153 | 60 | 0 | 0,77 | 5,20 | 0,00 |
| <i>Partial</i> | 34.078.748 | 23.510 | 248 | 5 | 0,07 | 1,05 | 2,02 |
| Free region | | | | | | | |
| Argentina | 13.631.284 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Free Brazil * | 6.491.441 | 184 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Chile | 3.695.062 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Guyana | ... | ... | ... | ... | ... | ... | ... |
| Paraguay | 398.111 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Uruguay | 12.403.678 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| <i>Partial</i> | 36.619.576 | 184 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Total | 70.698.324 | 23.694 | 248 | 5 | 0,04 | 1,05 | 2,02 |

* South and west central circuits (except Mato Grosso do Sul).

... No data.

Table 12. Morbidity and mortality from vesicular disease in goats. South America, 2000.

| Countries | Total | Population in affected flocks | Diseased | Dead | Morbidity / 10,000 | Rates Attack /100 | Fatality /100 |
|-----------------------------------|------------|-------------------------------|----------|------|--------------------|-------------------|---------------|
| Region with foot-and-mouth | | | | | | | |
| Bolivia | 1.639.902 | 1.634 | 529 | 127 | 3,23 | 0,00 | 0,00 |
| Affected Brazil | 10.692.185 | 85 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Colombia | 938.501 | 11 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Ecuador | 295.000 | 18 | 7 | 2 | 0,24 | 0,00 | 0,00 |
| Peru | 2.068.256 | 8.571 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Venezuela | 1.129.933 | 53 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| <i>Partial</i> | 16.763.777 | 10.372 | 536 | 129 | 0,32 | 5,17 | 24,07 |
| Free region | | | | | | | |
| Argentina | 2.528.118 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Free Brazil * | 470.592 | 18 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Chile | 727.310 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Guyana | ... | ... | ... | ... | ... | ... | ... |
| Paraguay | 121.774 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Uruguay | 6.641 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| <i>Partial</i> | 3.854.435 | 18 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Total | 20.618.212 | 10.390 | 536 | 129 | 0,26 | 5,16 | 24,07 |

* South and West central circuits (except Mato Grosso do Sul).
... No data.

Table 13. Morbidity and mortality from vesicular diseases in equines. South America, 2000.

| Countries | Population | | | | Rates | | |
|-----------|------------|-------------------|----------|------|--------------------|-------------|---------------|
| | Total | In affected herds | Diseased | Dead | Morbidity / 10,000 | Attack /100 | Fatality /100 |
| Argentina | 1.075.080 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Bolivia | 40.000 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Brazil | 9.078.250 | 308 | 11 | 0 | 0,01 | 3,57 | 0,00 |
| Chile | 430.399 | 0 | 0 | 0 | 0 | 0 | 0 |
| Colombia | 2.037.233 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Ecuador | 929.000 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Guyana | ... | ... | ... | ... | ... | ... | ... |
| Paraguay | 350.854 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Peru | 2.175.650 | 116 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Uruguay | 734.615 | 0 | 0 | 0 | 0,00 | 0,00 | 0,00 |
| Venezuela | 560.086 | 1.047 | 59 | 1 | 1,05 | 5,64 | 1,69 |
| Total | 17.411.167 | 1.471 | 70 | 1 | 0,04 | 4,76 | 1,43 |

... No data.

Table 14. Subtypes of foot-and-mouth disease and vesicular stomatitis virus identified in the Referral Laboratory. South America, 2000.

| Country | Foot-and-mouth | | |
|-----------|----------------|-----------------|---|
| | O | A | C |
| Argentina | | | |
| Bolivia | O ₁ | A ₂₄ | |
| Brazil | O ₁ | A ₂₄ | |
| Colombia | | | |
| Ecuador | | | |
| Paraguay | | A ₂₄ | |
| Peru | | | |
| Uruguay | O ₁ | | |
| Venezuela | | | |

Table 15. Number of establishments affected by vesicular stomatitis, by type of virus and country. Central America and Mexico, 2000.

| Countries | New Jersey | Indiana | Undiagnosed | Total |
|-------------|------------|---------|-------------|-------|
| Costa Rica | ... | ... | ... | ... |
| El Salvador | 43 | 0 | 36 | 79 |
| Guatemala | ... | ... | ... | ... |
| Honduras | 47 | 4 | 7 | 58 |
| Nicaragua | 141 | 0 | 3 | 144 |
| Panama | 31 | 20 | 0 | 51 |
| Mexico | 22 | 0 | 0 | 22 |
| Total | 284 | 24 | 46 | 354 |

... No data.

Table 16. Monthly distribution of establishments affected by FOOT-AND-MOUTH DISEASE, by regional subproject.

South America, 2000.

| Project/Subproject | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total | % |
|--------------------------------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|------------|---------------|
| Atlantic Coast - Lake Maracaibo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0,80 |
| Colombian-Venezuelan Plain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0,80 |
| Rest of Venezuela | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 1,20 |
| Rest of Colombia | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 8 | 3,20 |
| Colombia - Ecuador Border | 0 | 1 | 2 | 1 | 7 | 0 | 4 | 10 | 2 | 2 | 0 | 0 | 29 | 11,60 |
| Ecuadorian Coast | 1 | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 11 | 4,40 |
| Rest of Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 5 | 2,00 |
| Ecuador - Peru Border | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0,80 |
| Untouched area of Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Rest of Peru | 1 | 2 | 6 | 0 | 0 | 1 | 2 | 1 | 28 | 11 | 0 | 0 | 52 | 20,80 |
| Bolivia - Peru Border | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Eastern Plains Bol. | 11 | 4 | 0 | 0 | 9 | 15 | 9 | 3 | 1 | 1 | 2 | 12 | 67 | 26,80 |
| Rest of Bolivia | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0,80 |
| Andes | 13 | 10 | 12 | 2 | 19 | 17 | 15 | 22 | 32 | 17 | 8 | 16 | 183 | 73,20 |
| Amazon Basin | 1 | 3 | 2 | 7 | 2 | 3 | 6 | 1 | 1 | 0 | 0 | 0 | 26 | 10,40 |
| Northeastern Brazil | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 6 | 5 | 0 | 0 | 16 | 6,40 |
| Eastern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| West Central Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Amazon Basin Non-Amazonian Brazil | 1 | 3 | 2 | 7 | 2 | 4 | 6 | 5 | 7 | 5 | 0 | 0 | 42 | 16,80 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Southern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 2 | 0 | 0 | 0 | 22 | 8,80 |
| Chile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Paraguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 1,20 |
| River Plate Basin/Southern Cone | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 2 | 3 | 0 | 0 | 25 | 10,00 |
| Total | 14 | 13 | 14 | 9 | 21 | 21 | 21 | 47 | 41 | 25 | 8 | 16 | 250 | 100,00 |

Table 17. Monthly distribution of establishments affected by foot-and-mouth disease virus "O," by regional subproject
South America, 2000.

| Project/Subproject | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total | % |
|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------|--------|
| Atlantic Coast - Lake Maracaibo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1,43 |
| Colombian-Venezuelan Plains | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Rest of Venezuela | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Rest of Colombia | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 8 | 11,43 |
| Colombia - Ecuador Border | 0 | 1 | 2 | 1 | 7 | 0 | 4 | 10 | 1 | 2 | 0 | 0 | 28 | 40,00 |
| Ecuadorian Coast | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 8 | 11,43 |
| Rest of Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1,43 |
| Ecuador - Peru Border | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2,86 |
| Untouched area of Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Rest of Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Bolivia - Peru Border | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Eastern Plains Bol. | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 8,57 |
| Rest of Bolivia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Andes | 0 | 2 | 6 | 2 | 10 | 1 | 4 | 14 | 1 | 4 | 4 | 6 | 54 | 77,14 |
| Amazon Basin | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4,29 |
| Northeastern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 4 | 5,71 |
| Eastern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| West Central Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Amazon Basin Non-Amazonian Brazil | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 7 | 10,00 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Southern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 6 | 8,57 |
| Chile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Paraguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 4,29 |
| River Plate Basin/Southern Cone | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 3 | 0 | 0 | 9 | 12,86 |
| Total | 0 | 2 | 7 | 4 | 10 | 1 | 4 | 21 | 2 | 7 | 4 | 6 | 70 | 100,00 |

Table 18. Monthly distribution of establishments affected by Foot-and-mouth disease virus A, by regional subproject.
South America, 2000.

| Project/Subproject | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total | % |
|--------------------------------------|----------|----------|----------|----------|----------|----------|-----------|----------|-----------|----------|----------|----------|-----------|---------------|
| Atlantic Coast - Lake Maracaibo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Colombian-Venezuelan Plains | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 2,35 |
| Rest of Venezuela | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 3,53 |
| Rest of Colombia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Colombia-Ecuador Border | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1,18 |
| Ecuadorian Coast | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 3,53 |
| Rest of Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 4 | 4,71 |
| Ecuador - Peru Border | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Untouched area of Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Rest of Peru | 1 | 2 | 6 | 0 | 0 | 1 | 2 | 1 | 28 | 7 | 0 | 0 | 48 | 56,47 |
| Bolivia - Peru Border | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Eastern Plains | 2 | 3 | 0 | 1 | 3 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 16 | 18,82 |
| Rest of Bolivia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Andes | 4 | 6 | 6 | 1 | 4 | 3 | 7 | 5 | 30 | 8 | 2 | 1 | 77 | 90,59 |
| Amazon Basin | 0 | 0 | 0 | 1 | 1 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 8 | 9,41 |
| Northeastern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Eastern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| West Central Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Amazon Basin Non-Amazonian Brazil | 0 | 0 | 0 | 1 | 1 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 8 | 9,41 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Southern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Chile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Paraguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| River Plate Basin/Southern Cone | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Total | 4 | 6 | 6 | 2 | 5 | 4 | 11 | 6 | 30 | 8 | 2 | 1 | 85 | 100,00 |

Table 19. Monthly distribution of establishments affected by foot-and-mouth disease virus C, by regional subproject. South America, 2000.

| Project/Subproject | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total | % |
|--|---|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-------|---|
| Atlantic Coast - Lake Maracaibo Colombian-Venezuelan Plains Rest of Venezuela Rest of Colombia Colombia - Ecuador Border Ecuadorian Coast Rest of Ecuador Ecuador - Peru Border Untouched area of Peru Rest of Peru Bolivia - Peru Border Eastern Plains Bol. Rest of Bolivia Andes | NO RECORDED CASES OF FOOT-AND-MOUTH-DISEASE VIRUS "C" | | | | | | | | | | | | | |
| Amazon Basin Northwest Brazil Eastern Brazil West Central Brazil Amazon Basin Non-Amazonian Brazil | NO RECORDED CASES OF FOOT-AND-MOUTH-DISEASE VIRUS "C" | | | | | | | | | | | | | |
| Argentina Southern Brazil Chile Paraguay Uruguay River Plate Basin/Southern Cone | NO RECORDED CASES OF FOOT-AND-MOUTH-DISEASE VIRUS "C" | | | | | | | | | | | | | |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 20. Monthly distribution of establishments affected by vesicular stomatitis-New Jersey virus, by regional subproject.

South America, 2000.

| Project/Subproject | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total | % |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|---------------|
| Atlantic Coast - Lake Maracaibo | 16 | 22 | 15 | 7 | 11 | 5 | 11 | 5 | 9 | 14 | 22 | 20 | 157 | 38,57 |
| Colombian-Venezuelan plains | 21 | 10 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 18 | 13 | 67 | 16,46 |
| Rest of Venezuela | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 10 | 2,46 |
| Rest of Colombia | 23 | 15 | 19 | 12 | 8 | 15 | 16 | 6 | 6 | 7 | 11 | 15 | 153 | 37,59 |
| Colombia-Ecuador Border | 1 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1,72 |
| Ecuadorian Coast | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0,49 |
| Rest of Ecuador | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0,25 |
| Ecuador - Peru Border | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 0,74 |
| Untouched area of Peru | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0,25 |
| Rest of Peru | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 1,47 |
| Bolivia - Peru Border | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Eastern Plains Bol. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Rest of Bolivia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Andes | 66 | 55 | 41 | 20 | 21 | 21 | 27 | 11 | 19 | 25 | 51 | 50 | 407 | 100,00 |
| Amazon Basin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Northeastern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Eastern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| West Central Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Amazon Basin Non-Amazonian Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Southern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Chile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Paraguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| River Plate Basin/Southern Cone | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Total | 66 | 55 | 41 | 20 | 21 | 21 | 27 | 11 | 19 | 25 | 51 | 50 | 407 | 0,00 |

Table 21. Monthly distribution of establishments affected by vesicular stomatitis-Indiana virus, by regional subproject.

South America, 2000.

| Project/Subproject | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Total | % |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|---------------|
| Atlantic Coast-Lake Maracaibo | 3 | 3 | 4 | 2 | 1 | 1 | 1 | 2 | 0 | 1 | 1 | 3 | 22 | 8,84 |
| Colombian-Venezuelan plains | 0 | 1 | 8 | 6 | 2 | 9 | 9 | 9 | 13 | 4 | 7 | 2 | 70 | 28,11 |
| Rest of Venezuela | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 1,20 |
| Rest of Colombia | 8 | 7 | 14 | 9 | 16 | 11 | 1 | 1 | 1 | 1 | 16 | 7 | 92 | 36,95 |
| Colombia-Ecuador Border | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0,40 |
| Ecuadorian Coast | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 4 | 1,61 |
| Rest of Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Ecuador - Peru Border | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 2 | 0 | 6 | 2,41 |
| Untouched area of Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Rest of Peru | 1 | 1 | 1 | 1 | 5 | 2 | 0 | 1 | 3 | 0 | 0 | 1 | 16 | 6,43 |
| Bolivia - Peru Border | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Eastern Plains Bol. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Rest of Bolivia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Andes | 12 | 12 | 28 | 20 | 24 | 23 | 14 | 15 | 20 | 7 | 26 | 13 | 214 | 85,94 |
| Amazon Basin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Northeastern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Eastern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 9 | 5 | 0 | 25 | 10,04 |
| West Central Brazil | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 2 | 0 | 10 | 4,02 |
| Amazon Basin Non-Amerasian Brazil | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 12 | 12 | 7 | 0 | 35 | 14,06 |
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Southern Brazil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Chile | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Paraguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| River Plate Basin/Southern Cone | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0,00 |
| Total | 14 | 12 | 29 | 20 | 24 | 23 | 14 | 16 | 32 | 19 | 33 | 13 | 249 | 100,00 |

Table 22. Strains used in the production of foot-and-mouth vaccine. South America, 2000.

| Country | Strains | | |
|-----------|---------------------------------|--|--------------------------------|
| | O | A | C |
| Argentina | O ₁ Caseros - Arg/67 | A ₇₉ - Arg/79 A ₉₁ - Arg/87 | C ₃ - Arg/85 |
| Brazil | O ₁ Campos - Br/58 | A ₂₄ Cruzeiro - Br/55 | C ₃ Indaial - Br/71 |
| Colombia | O ₁ Campos - Br/58 | A ₂₄ Cruzeiro - Br/55 | |
| Venezuela | O ₁ Campos - Br/58 | A ₂₄ Cruzeiro - Br/55 | |

Table 23. Production, testing, and availability of foot-and-mouth vaccine, by country, South America, 2000

| Country | Adjuvant | Valence | Produced | Tested | Approved | Exported | Imported | Available |
|-----------|----------|------------|-------------|-------------|-------------|------------|------------|-------------|
| Argentina | Oily | Trivalent | ... | ... | 6.673.335 | 6.371.775 | 0 | 301.560 * |
| | | Bivalent | ... | ... | 5.559.495 | 5.559.495 | 0 | 0 |
| | | Monovalent | ... | ... | 5.136.220 | 5.136.220 | 0 | 0 |
| Bolivia | Oily | Trivalent | 0 | 3.301.455 | 3.301.455 | 0 | 3.301.455 | 0 |
| Brazil | Oily | Trivalent | 324.007.400 | 324.007.400 | 274.498.980 | 13.891.500 | 0 | 288.117.800 |
| Colombia | Oily | Bivalent | 38.684.560 | 38.684.560 | 37.326.990 | 6.772.800 | 0 | 30.554.190 |
| Ecuador | Oily | Bivalent | 0 | 3.543.635 | 3.543.635 | 0 | 3.543.635 | 4.819.100 * |
| Paraguay | Oily | Trivalent | 0 | 5.000.000 | 5.000.000 | 620.000 | 5.000.000 | 5.000.000 * |
| Peru | Oily | Trivalent | 0 | 0 | 0 | 0 | 0 | 1.500.000 |
| Venezuela | Oily | Bivalent | 5.763.775 | 5.763.775 | 4.763.775 | 0 | 16.330.000 | 1.400.000 |
| Total | | Trivalent | 324.007.400 | 332.308.855 | 289.473.770 | 20.863.275 | 8.301.455 | 294.919.360 |
| | Oily | Bivalent | 44.448.335 | 47.991.970 | 51.193.895 | 12.332.295 | 19.873.635 | 36.773.290 |
| | | Monovalent | ... | ... | 5.136.220 | 5.136.220 | 0 | 0 |

* Stored or produced in previous year.

Table 24.

Number of animals vaccinated for foot-and-mouth disease. South America, 2000.

| Country | Systematic vaccination | | Strategic vaccination | | |
|--------------|------------------------|--------------------|-----------------------|----------------|----------------|
| | Cattle Two doses | Cattle One dose | Cattle | Pigs | Sheep or Goats |
| Argentina | 0 | 0 | 0 | 0 | 0 |
| Bolivia | 576.185 | 3.265.485 | 45.500 | 1.500 | 17830 |
| Brazil | 84.299.219 | 63.418.943 | 11.353.320 | 768 | 4.334 |
| Colombia | 33.796.973 | 345.294 | 962.308 | 68.433 | 2.330 |
| Ecuador | 435.150 | 1.971.549 | 59.145 | 99.010 | 0 |
| Paraguay | 0 | 0 | 3.827.552 | 0 | 0 |
| Peru | 321.898 | 977.455 | 108.241 | 1.404 | 0 |
| Venezuela | 10.232.214 | 0 | 53.110 | 0 | 0 |
| Total | 129.661.639 | 69.978.726 | 16.409.176 | 171.115 | 24.494 |

Table 25. Coverage of programs to combat foot-and-mouth disease. South America, 2000.

| Country | Area in km ² | | Herds of Cattle | | Cattle population | |
|-----------------------------------|-------------------------|-------------|-----------------|------------|-------------------|-------------|
| | Total | In program | Total | In program | Total | In Program |
| Region with foot-and-mouth | | | | | | |
| Bolivia | 1,098,581 | 1,098,581 | ... | 4,115 | 5,303,709 | 5,303,709 |
| Brazil | 5,980,920 | 4,552,311 | 1,048,247 | 919,026 | 78,714,022 | 72,847,563 |
| Colombia | 1,141,318 | 1,141,318 | 474,500 | 474,500 | 20,064,059 | 20,064,059 |
| Ecuador | 274,045 | 274,045 | 251,445 | 251,445 | 5,630,545 | 5,630,545 |
| Peru | 1,285,216 | 1,285,216 | 855,701 | 855,701 | 4,903,363 | 4,903,363 |
| Venezuela | 910,000 | 910,000 | 86,823 | 86,823 | 11,768,899 | 11,768,899 |
| <i>Sub-total</i> | 10,690,080 | 9,261,471 | 2,716,716 | 2,591,610 | 126,384,597 | 120,518,138 |
| Free region | | | | | | |
| Argentina | 275,884,471 | 275,884,471 | 356,191 | 356,191 | 50,124,545 | 50,124,545 |
| Brazil* | 2,418,093 | 2,418,093 | 1,277,091 | 1,277,091 | 87,158,032 | 87,158,032 |
| Chile | 192,348 | 192,348 | 160,218 | 160,218 | 4,098,438 | 4,098,438 |
| Guyana | 215,020 | 215,020 | 1,600 | 1,600 | 245,000 | 245,000 |
| Paraguay | 406,752 | 406,752 | 229,478 | 229,478 | 9,144,570 | 9,144,570 |
| Uruguay | 176,215 | 176,215 | 68,361 | 68,361 | 10,133,131 | 10,133,101 |
| <i>Sub-total</i> | 279,292,899 | 279,292,899 | 2,092,939 | 2,092,939 | 160,903,716 | 160,903,686 |
| Total | 289,982,979 | 288,554,370 | 4,809,655 | 4,684,549 | 287,288,313 | 281,421,824 |

* South and west central circuits (except Mato Grosso do Sul).
... No data.

Table 26. Human Resources assigned to programs to combat foot-and-mouth disease, by country. South America, 2000.

| Country | Field operating units | Professional | | Other | |
|----------------------|-----------------------|--------------|--------------|--------------|---------------|
| | | Headquarters | Laboratory | Headquarters | Laboratory |
| Affected area | | | | | |
| Bolivia | ... | ... | ... | ... | ... |
| Brazil | 1.104 | 33 | 81 | 26 | 149 |
| Colombia | 129 | ... | 13 | ... | 9 |
| Ecuador | 48 | 17 | 1 | 5 | 1 |
| Peru | ... | 2 | 2 | 0 | 3 |
| Venezuela | 156 | ... | 18 | ... | 17 |
| Free area | | | | | |
| Argentina | 321 | ... | 15 | ... | 14 |
| Brazil* | 1.073 | 0 | 17 | 0 | 55 |
| Chile | 62 | 4 | 2 | 6 | 2 |
| Guyana | 9 | ... | 5 | ... | 5 |
| Paraguay | 65 | ... | 21 | ... | 30 |
| Uruguay | 43 | ... | 13 | ... | 14 |
| Total | 3.010 | 56 | 188 | 37 | 299 |
| | | | 4.870 | | 11.123 |

* South and West central circuits (except Mato Grosso do Sul).

... No data

Table 27. Human resources assigned to programs to combat foot-and-mouth disease. South America, 1999 - 2000

| Country | 1999 | | | 2000 | | | |
|----------------------|--------------|------------|--------|--------------|------------|-------|--------|
| | Headquarters | Laboratory | Field | Headquarters | Laboratory | Field | Total |
| Affected area | | | Total | | | | |
| Bolivia | ... | 32 | 44 | 76 | ... | ... | ... |
| Brazil | 53 | 246 | 9.033 | 9.332 | 56 | 230 | 6.525 |
| Colombia | ... | 32 | 417 | 449 | ... | 22 | 398 |
| Ecuador | 19 | 2 | 103 | 124 | 22 | 2 | 152 |
| Peru | ... | 5 | 1.683 | 1.688 | 2 | 5 | 863 |
| Venezuela | ... | 35 | 199 | 234 | ... | 35 | 234 |
| <i>Partial</i> | 72 | 352 | 11.479 | 11.903 | 80 | 294 | 8.172 |
| Free area | | | | | | | |
| Argentina | ... | 38 | 704 | 742 | ... | 29 | 1.243 |
| Brazil | 0 | 52 | 2.473 | 2.525 | 0 | 72 | 6.141 |
| Chile | 10 | 4 | 160 | 174 | 4 | 4 | 168 |
| Guyana | ... | ... | ... | ... | ... | ... | ... |
| Paraguay | ... | 52 | 390 | 442 | ... | 51 | 422 |
| Uruguay | ... | 27 | 330 | 357 | ... | ... | 274 |
| <i>Partial</i> | 10 | 173 | 4.057 | 357 | 4 | 156 | 8.248 |
| Total | 82 | 525 | 15.536 | 12.260 | 84 | 450 | 15.886 |
| | | | | | | | 16.420 |

... No data.

Table 28. Inventory of vehicles assigned to programs to combat foot and mouth disease, by country and year.

South America, 1999 - 2000

| Country | 1999 | | | 2000 | | |
|---------------------------------|--------------|-------------|--------------|--------------|-------------|--------------|
| | Cars | Motorcycles | Total | Cars | Motorcycles | Total |
| Area with foot-and-mouth | | | | | | |
| Bolivia | 25 | 15 | 40 | 17 | 27 | 44 |
| Brazil | 2841 | 197 | 3038 | 1795 | 265 | 2060 |
| Colombia | 108 | 283 | 391 | 96 | 277 | 373 |
| Ecuador | 54 | 0 | 54 | 65 | 0 | 65 |
| Peru | 44 | 113 | 157 | 29 | 24 | 53 |
| Venezuela | 76 | 0 | 76 | 75 | 0 | 75 |
| <i>Partial</i> | 3.148 | 608 | 3.756 | 2.077 | 593 | 2.670 |
| Free area | | | | | | |
| Argentina | 112 | 10 | 122 | ... | ... | ... |
| Brazil | 507 | 0 | 507 | 2205 | 4 | 2.209 |
| Paraguay | 82 | 51 | 133 | 87 | 55 | 142 |
| Chile | 269 | 0 | 269 | 241 | 0 | 241 |
| Guyana | ... | ... | ... | | | 0 |
| Uruguay | 75 | 164 | 239 | 57 | 164 | 221 |
| <i>Partial</i> | 1045 | 225 | 1270 | 2590 | 223 | 2813 |
| Total | 4.193 | 833 | 5.026 | 4.667 | 816 | 5.483 |

... No data.

Table 29. Public and private expenditures for programs to combat foot-and-mouth disease in US dollars. South America, 2000.

| Country | Public | | | Private | Total |
|-----------------------------------|---------------|---------------|---------------|----------------|----------------|
| | Operating | Capital | Total | | |
| Region with foot-and-mouth | | | | | |
| Bolivia | ... | ... | ... | ... | ... |
| Brazil | 54.819.152,00 | 17.500.882,00 | 72.320.034,00 | 124.268.244,00 | 196.588.278,00 |
| Colombia | 481.203,00 | 2.702.845,00 | 3.184.048,00 | 6.073.334,00 | 9.257.382,00 |
| Ecuador | 21.101,00 | 181.023,00 | 202.124,00 | 1.908.000,00 | 2.110.124,00 |
| Peru | 178.454,00 | 1.443.250,00 | 1.621.704,00 | 0,00 | 1.621.704,00 |
| Venezuela | 85.000,00 | 1.676.000,00 | 1.761.000,00 | 10.000.000,00 | 11.761.000,00 |
| <i>Partial</i> | 55.584.910,00 | 23.504.000,00 | 79.088.910,00 | 142.249.578,00 | 221.338.488,00 |
| Free region | | | | | |
| Argentina | ... | ... | ... | ... | ... |
| Chile | 115.527,00 | 2.296.193,00 | 2.411.720,00 | 0,00 | 2.411.720,00 |
| Guyana | ... | ... | ... | ... | ... |
| Paraguay | 484.326,00 | 1.513.378,00 | 1.997.704,00 | 10.950.504,00 | 12.948.208,00 |
| Uruguay | 310.000,00 | 6.985.000,00 | 7.295.000,00 | 0,00 | 7.295.000,00 |
| <i>Partial</i> | 909.853,00 | 10.794.571,00 | 11.704.424,00 | 10.950.504,00 | 22.654.928,00 |
| Total | 56.494.763,00 | 34.298.571,00 | 90.793.334,00 | 153.200.082,00 | 243.993.416,00 |

... No data.

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