USDA’s support for FMD eradication in Latin America: History, Current Status, and Future Challenges

Dr. Conrad Estrada
Dr. Cesar Orozco

USDA APHIS International Services

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Objective

To provide stakeholders with an update of the progress of FMD eradication, disease status (as defined by OIE) in South America, and the status of APHIS programs in Latin America to support animal health safeguarding activities overseas.
Summary

• Historic FMD Outbreaks in the Americas

• Present FMD Situation in the Americas

• US Support to FMD Control in the Americas

• USDA Bi-lateral FMD Programs Funding

• On-going Cooperation with the Americas in FMD Control/Eradication
Historic FMD Outbreaks in the Americas

• Nine outbreaks in the US: 1870, 1880, 1884, 1902, 1908, 1914, 1924 (2), 1929

• Canada 1952 and Mexico 1946-1954
Historic FMD Outbreaks in the Americas

- Never detected in Central America

- Caribbean
  - Jamaica in 1922-1924
  - Martinique and Guadeloupe in 1952
  - Aruba in 1953 and 1957
  - Curacao in 1957, 1970 and 1976
Historic FMD Outbreaks in the Americas

- South America
  - Argentina - 1865/1866
  - Uruguay and Brazil – 1870/1871
  - Peru and Chile – 1910
  - Bolivia and Paraguay - 1912
  - Venezuela and Colombia: 1950/1951
  - French Guiana - 1953
  - Ecuador – 1956
  - Guyana suffered limited outbreaks in the southern plains bordering Brazil in 1961, 1969, 1974 and 1978
Vesicular Disease Investigations in South America

Vesicular Disease Investigations in 2013

Cases of Vesicular Stomatitis in 2013

Cases of Foot-and-Mouth Disease 2013

Source: J. Naranjo – PAHO PANAFTOSA
Progressive Control Pathway: Risk Reduction Approach

FMD Free with Vaccination

OIE Endorsed FMD Program
Terrestrial Code Article 8.7.48

FMD Program not Endorsed by the OIE
Progress of FMD Eradication in South America

April 2013

May 2014

Source: J. Naranjo – PAHO PANAFTOSA
Foot-and-Mouth Disease C: 1992-2011

Source: J. Naranjo – PAHO PANAFTOSA
Foot-and-Mouth Disease A: 1992-2011

Source: J. Naranjo – PAHO PANAFTOSA
Foot-and-Mouth Disease O: 1992-2011

Source: J. Naranjo – PAHO PANAFTOSA
Foot-and-Mouth Disease O

Source: J. Naranjo – PAHO PANAFTOSA
Present FMD Situation in the Americas

- All of North America, Central America, and Caribbean are free of FMD without vaccination

- Chile is free of FMD without vaccination. Argentina, Bolivia, Brazil, Colombia and Peru have zones where vaccination is not practiced.

- During the last 5 years, 3 countries of the South America region reported FMD outbreaks: Ecuador, Venezuela and Paraguay

- Last outbreaks of FMD
  - Bolivia: 2007
  - Ecuador: 2011
  - Paraguay: 2012
  - Venezuela: 2011 - ?
FMD Vaccination in South America

Vaccine Strains
- 1 No vaccination
- 2 O1 Campos A 24 Cruzeiro
- 3 O1 Campos A 24 Cruzeiro C 3 Indaiatuba
- 4 O1 Campos A 24 Cruzeiro A Arg/2001 C 3 Indaiatuba

Source: J. Naranjo – PAHO PANAFTOSA
US Support to FMD Control in the Americas

Animal Disease Control Cooperation Act of 1947 [PL 92-152 (21 USC 114b)]

“The Secretary of Agriculture is authorized to cooperate with the Governments of foreign countries, and with foreign or international organizations or associations in carrying out operations or measures to eradicate, suppress, or control, or to prevent or retard, any communicable disease of animals or vectors thereof, including but not limited to foot-and-mouth disease, rinderpest, or screwworm in such countries where he deems such action necessary to protect the livestock, poultry, and related industries of the United States.”
US Support to FMD Control in the Americas

Animal Disease Control Cooperation Act of 1947 [PL 92-152 (21 USC 114b)]


- 1971—Pub. L. 92–152: authorizes cooperation with Governments of Guatemala, El Salvador, Costa Rica, Honduras, Nicaragua, British Honduras, Panama, Colombia, and Canada, directed operations and measures to be taken against communicable diseases of animals, and included protection of poultry within its scope.

- 1976—Pub. L. 94–231: substituted “Belize” for “British Honduras”, inserted “, the Bahama Islands, the Greater Antilles, and the Lesser Antilles, and with international organizations or associations” after “Canada”, and inserted “or vectors thereof” after “any communicable disease of animals”.

- 1990—Pub. L. 101–624: substituted “foreign countries” for “Mexico, Guatemala, El Salvador, Costa Rica, Honduras, Nicaragua, Belize, Panama, Colombia, and Canada, the Bahama Islands, the Greater Antilles, and the Lesser Antilles” and inserted “foreign or” before “international”.

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US Support to FMD Control in the Americas

**Animal Disease Control Cooperation Act of 1947 [PL 92-152 (21 USC 114b)]**

- 1947: Mexico

- 1971: Agreements associated with completion of Pan-American Highway with
  - Panama – COPFA
  - Colombia – ICA/USDA Cooperative FMD Program

- Confirmatory Bi-lateral Agreement (Comision Antiaftosa Bilateral)
  - 1972: Belize, Costa Rica, Honduras, Nicaragua, Panama
  - 1973: El Salvador
  - 1977: Guatemala
Bi-lateral FMD Programs in Central America

• The US Veterinary counterpart and the CAB counterpart in each country have the following cooperative activities:

  a) Surveillance and epidemiological studies

  b) Investigate and attend reports

  c) Collect diagnostic material

  d) Organize livestock owner’s vigilance groups
Bi-lateral FMD Programs in Central America

e) Develop educational programs
f) Develop and improve prevention, control, and eradication procedures
g) Recommend and place into operation effective legislation
h) Develop and distribute informational material
USDA Bi-lateral FMD Programs Funding

• Modifications to Explanatory Notes to Congress
  – Expanded use of FMD funding outside the Americas in 1995/1996 (presented at 1995 USAHA meeting)
  – “FMD/Emerging FAD” in 1999
  – “Foreign Animal Diseases/FMD” in 2002
  – “FAD/FMD” in 2003
  – In 2009 the OTTO line was created and half of the FAD/FMD money was shifted into that line item
    • $8.6M in 2008 and $4.0M in 2009
  – PL 480 funds.
1990 Goal: Prevent FMD in South America from entering Panama, Central America, Mexico, and the U.S.

“Other FAD” (Foreign Animal Diseases) mentioned for first time – Expansion of scope of goal?

Goal: To control and eradicate FMD from Colombia, to prevent it from entering Panama, C.A., MX, and U.S.

2000 Goal: “Exclusion objectives will continue to shift from maintaining a static barrier in Colombia to supporting PAHO’s hemispheric eradication plan.”

2012: Remaining $4.0 million from FAD/FMD line item is transferred to OTTO as part of an APHIS line item consolidation; FAD activities continue unchanged.

2013: As part of an overall APHIS budget reduction, FAD funding to cooperative governments and international organizations is reduced by $2.2 million. Personnel and resources remain to provide technical assistance to partners on the highest risk diseases, including FMD.
USDA Bi-lateral FMD Programs Funding

• All cooperative agreement funding concluded between 2011 – 2014

• Counterparts informed and property management completed

•APHIS has ongoing activities with Latin American counterparts
APHIS International Services in LAC Region

- Eric Hoffman – AD
- Paula Morales
- Miriam Reyes
- Roberto Pantaleon
- Wayne DeChi
- Peter Fernandez – RD
- Roberto Guzman
- Conrad Estrada – AD
- Thereza Barros
- Cesar Orozco
- Ricardo Romero

- Luis Caniz
- Adolfo Caravantes
- Jeff Austin – AD
- Marco Gonzalez
- Cesar Sandoval
- Esteban Espinosa
- George (Andy) Ball - AD
- Anabella Reszczynsky
On-going Cooperation with the Americas in FMD Control/Eradication

• Memorandum of Understanding (Costa Rica and Nicaragua)
• Increased cooperation in animal disease control with OIRSA and IICA
• Provide access to USDA-APHIS technical expertise
• Provided excess CSF vaccine to Guatemala
• International Transboundary Animal Disease courses at Plum Island (1999 to present) – Spanish
• Development of 3-day Transboundary Animal Disease course (Peru – November 2011)
• Avian Influenza (and other transboundary animal disease) training
• Incident Command System training (proposed)
Eradication of FMD in South America
Priorities and Next Steps (COSALFA)

• South American FMD vaccine bank
  – Funding from member countries
  – Quality standards for vaccine and antigens produced for the bank
  – Risk Analysis to determine FMD antigens and vaccines to have in a vaccine bank
  – PANAFTOSA is directly engaging with experts of the NAFMDVB

• Countries should work on updating their emergency response plans
Eradication of FMD in South America Priorities and Next Steps (COSALFA)

• Plan a meeting for stakeholders of the Hemispheric Plan for the Eradication of FMD (PHEFA) “Houston Declaration 2.0”
  – Planned in Washington DC on early 2015

• Continue international collaboration in supporting to the final stages of FMD eradication in South America
Conclusions

• APHIS continues to be a strong partner in the eradication of FMD and surveillance of vesicular diseases in Latin America
  – APHIS has partnered with IICA to fund seroepidemiological studies in Venezuela and Bolivia
  – Training in Central (FMD never detected) and South America
  – Collaborating with PANAFTOSA, IICA, OIRSA

• Important progress has been made to eradicate FMD in South America (PHEFA goal 2020) – More countries are being recognized by the OIE as free of FMD with or without vaccination
Non-Finito / Unfinished

Source: http://www.accademia.org
Thank you

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