FMD control in Mongolia

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Symposium on Prevention and Control of Foot and Mouth Disease in East Asia, 13-14 Nov 2014 Tokyo
OUTLINE

Background to Mongolia
FMD history
FMD control strategy and mission of CMC
Public awareness
Information sharing
Problems for emergency preparedness responses related with FMD and TAD
Background to Mongolia

- Population: 2.9 million
- Area: 1.6 million km²
- Livestock: 60 million
- GDP: 16-20%, Agriculture, it’s 75% contributed from livestock
- 160.3 thousands herder households
The history of FMD in Mongolia

- First period: 1931 ~ 1935,
- Second period: 1941 ~ 1948,
- Third period: 1963 ~ 1974, (O and A)
  - Control movement, disinfection and by artificial infection;
  - No cases of FMD since 1974, until June 2000;
- Forth period: 2000 ~ 2010 (O and Asia-1),
  - Control movement, disinfection, eradication and control, stamping out, vaccination, public awareness, collaboration OIE, FAO, other donors, organizations and neighbor countries
- Fifth period: 2013 (A), 2014 (O)
  - Control movement, disinfection, eradication and control, stamping out, vaccination, public awareness, collaboration OIE, FAO, other donors, organizations and neighbor countries
In total 10 outbreaks reported in 15 years
Recent history of FMD outbreaks in Mongolia

2000-2010 serotype O
2005 serotype Asia-1
2013, serotype A
2013, serotype A
2014, serotype O
FMD outbreaks (2013)

In July, 2013
- 1st case in Sagsai soum, Bayan Ulgii province

In September, 2013
- 2nd case of FMD, Khalkh gol soum, Dornod province

(quarantine, all movement control, stamping out, disinfection, emergency vaccination, surveillance, public awareness, collaboration)
FMD outbreaks, 2014

- 1st case in Ongon soum, Sukhbaatar province on 28 Jan, 2014
- Second case in Naran soum, Sukhbaatar province on 4 Feb, 2014
- Bayandelger soum, Sukhbaatar province on 5 Feb, 2014 …

(quarantine, all movement control, stamping out, disinfection, emergency vaccination, surveillance, public awareness, collaboration)
- 3 provinces affected
- 13 soums
- 3560 animals destroyed
- 28 Jan-23 March, 2014

FMD outbreak 2014
Mongolia
Zoning management of 2014 outbreaks
Implemented measures in zones

• **Outbreak zone** (Red zone)
  • Quarantine
  • Disinfection
  • Modified stamping out
  • Vaccination
  • Compensation
  • Surveillance
  • Cooperation
  • Public awareness

• **Buffer zone** (Yellow zone)
  • Quarantine and movement restriction
  • Disinfection
  • Vaccination
  • Cooperation
  • Surveillance (NSP)

• **Protection zone** (Green zone)
  • Movement control
  • Disinfection
  • Cooperation
  • Public awareness
  • Vaccine monitoring
Emergency vaccination

- bivalent (A and O), Vladimir, Russia
- trivalent vaccine (A, O, Asia-1), Khukh Khot, China
- trivalent vaccine (A, O, Asia-1), Merial from OIE
Regular vaccination area since 2010-2013
Surveillance to detect infection of FMD (2010-2014)

Free zone

Protection zone

Eastern zone

Legends
- Center of aimag
- Boundary of aimag
- Boundary of soums
- FMD free western zone. Non vaccination. Surveillance per year
- FMD control central zone. Non vaccination. Surveillance in 2012
- FMD free eastern zone. Vaccination
FMD vaccination in 2015
FMD control strategy in Mongolia (2015-2020)

247 DECREE OF MONGOLIAN GOVERNMENT IN 2011
ACTIVITIES RELATED TO FMD CONTROL

FMD assessment

- FAO – CMC  Dr Ian Douglas, Dr Andrew McFadden, Mr Jie Wang, Dr Gregoria Torres in March 2014
- OIE - Dr. Eran Raizman, Dr. Sam Hamilton, Dr. Jeff Mariner, Dr. Jean Christophe Natorp in April 2014, /PPR/
- VABA, JTF Project

- Situation assessment
- High political commitment
- Advised on a detailed action plan
- Supported booster dose vaccination
- Key messages to decision makers and herders
- Current policy change
Policy/ Strategy changes

FMD control strategy and Contingency plan are updated and approved by Government of Mongolia on 7 July, 2014

Effective vaccination

Changed routine of vaccination strategy

- young animals every 6 months
- adults every 6 months
- defined risk area

Change modified stamping out

Review and agreed to change modified stamping out

- National and Regional meeting in May with stakeholders
- Expert meeting
- Approved by Government
Outbreak area activities are limited
  • SOPs for investigation, vaccination, cleaning and disinfection developed
  • Drill exercise on SOPs is planned for November

Surveillance strategy is changed:
  • Coverage – Western, Central, Eastern
    ▪ NSP testing
    ▪ Vaccine monitoring
  • Case study
  • Vaccine efficacy study with Pirbright Institute
Capacity building/ Human resource

- FMD policy changes
- Herder/ stakeholder role

Public communication

- 2015 budget – FMD variety of kits
- GIS tools- on-job training for staff
- FMD data analysis – in Japan, Dec 2014
- FMD laboratory analysis - in Japan, 2015
- OIE twinning program – under development

- FMD policy changes
- Herder/ stakeholder role
Collaboration on FMD control

• National
  • National emergency agency,
  • General agency for specialized inspection
  • Policy
  • Human health sector
  • Provincial and local level organizations

• International
  • OIE
  • FAO-CMC
Recommendation and Follow up activities

Awareness of decision makers and experts raised significantly

- Establish syndromic surveillance strategy
- PPR training and awareness
- Laboratory capacity for diagnosis
- Ensure access to PPR vaccine
- Develop PPR contingency plan
- Health requirements for import of small ruminants
- Information on website
- Border check points - activities improved
- Pamphlet/key messages are under development

- Introduction FMDV risk is high in the eastern part of country
- Spread of FMDV infection is high in the western part of the country
Further collaboration

• Communication strategy is not in place
• Lack of trained staff/scientists
• Lack of knowledge and expertise on disease control, joint surveillance in adjacent areas needed
• Planning for disease control – more surveillance than vaccination
• Cooperation on vaccine and diagnostics production - exchange research study
• Lack of knowledge and capacity on veterinary quality control drugs and biological products

• TA Communication stakeholders
• Short term training
  • outbreak investigation
  • data analysis
  • field epidemiology
• Development contingency plan for PPR
• Planning and disease control tools
Thanks for attention