Control of FMD in South East and East Asia: Virus Pool 1

Ronello Abila
OIE Sub-Regional Representative for South East Asia
Outline

• FMD Status in South East and East Asia
• SEACFMD Campaign
• SEACFMD 2020 Roadmap
• Application of PCP in SEACFMD members
• Strengthening of VS – OIE PVS Pathway
• Applicability of SEACFMD to other TADS and Zoonoses
# FMD viruses in Pool 1

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<thead>
<tr>
<th>Serotype</th>
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<tr>
<td>O</td>
<td>South East Asia</td>
<td>Myanmar 98 and Cambodia 94; endemic in SE Asia: reported in China, Korea and Japan in 2010</td>
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<td></td>
<td>Pan Asia</td>
<td>detected SE Asia in late 1990s</td>
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<td>Cathay</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; detected in Hong Kong in early 1990s</td>
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<td>A</td>
<td>South East Asia</td>
<td>Indigenous in SE Asia; reported in China in 2009 and Korea in 2010</td>
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<td>Asia 1</td>
<td>Asian</td>
<td>Last reported in Vietnam in 2007 and in China in 2009</td>
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SE Asia FMD Outbreaks (2000-2011)
Type O SEA in 2006

Mya98

Cathay
FMD Outbreaks in SE Asia (2000-2011)

Type O Panasia in 2010/11
Lao PDR (2000-2011)
Malaysia (2000-2011)
Vietnam (2000-2011)
Serotype O outbreaks in 2009
Serotype O outbreaks in 2010

- O SEA Mya98
- O Cathay
- O PanAsia
Serotype O outbreaks in 2011

- O SEA Mya98
- O Cathay
- O PanAsia
Serotype A outbreaks in 2008

A SEA 97
Serotype A outbreaks in 2009
Serotype A outbreaks in 2010

A India 2000

A SEA 97
Serotype A outbreaks in 2011
Serotype Asia 1 outbreaks in 2007

Last Outbreak of Asia 1 in Vietnam 2007
Serotype Asia 1 outbreaks in 2008
Serotype Asia 1 outbreaks in 2009

Last Outbreak of Asia 1 in China in 2009
The South East Asia and China Foot and Mouth Diseases (SEACFMD) Campaign

Approved by the OIE General Assembly in May 25, 2010, PARIS
Program Management

International Coordination

Public Awareness

Surveillance, Diagnosis and Control

Policy, Legislation, Zoning

Regional Research

Private Sector

Monitoring & Evaluation

SEACFMD Campaign
Coordination and Governance

- SEACFMD Sub-Commission
  - Steering Committee
  - Regional Coordination Unit
    - PSCC

Countries:
- Brunei Darussalam
- Cambodia
- China
- Indonesia
- Lao PDR
- Malaysia
- Myanmar
- Philippines
- Singapore
- Thailand
- Vietnam
18th Meeting of the OIE Sub-Commission for Foot and Mouth Disease in South-East Asia and China

Lijiang, P.R. China, 5-9 March 2012
National Coordination

- FMD National Coordinator
- LabNet focal point
- EpiNet focal point
- Communication focal point

FMD Control and Eradication
• Sub-Commission recommended Pakchong to become FMD RRL
• Opening of RRL in 2004
• 2010 recognised by OIE as FMD Reference Laboratory
• Harmonise diagnostic procedures in line with OIE standards
• Proficiency testing and quality assurance
Role of EpiNet

- develop a standardised set of protocols for FMD surveillance in the SEACFMD campaign
- a definition of an outbreak for SEACFMD and a case definition
- suggested minimum requirements for regional reporting
- design surveillance studies
Communication Network

- SEACFMD Regional Communication Plan
  - Align with the OIE Animal Health Communication Strategy for SE Asia
- Development of a Field Manual for Communication
- Launching of the SRR SEA Website, including SEACFMD
- Newsletter and E-news
SEACFMD 2020 Roadmap

SEAFMD 2020
A roadmap for foot and mouth disease freedom with vaccination by 2020 in South-East Asia

SEACFMD 2020
A roadmap to prevent, control and eradicate foot and mouth disease (by 2020) in South-East Asia and China
Roadmap principles

• Rapid identification of the foci of infection
  – surveillance

• Prevention of infection of susceptible hosts
  – restrict infected to contact healthy herd

• Elimination of the source of FMDV
  – disinfection

• Increasing herd and animal immunity
  – vaccination
SEACFMD Roadmap 2020 Strategies

First Strategy

• Reduce FMD prevalence by targeting hotspots and critical points
  – Decreasing the prevalence ‘at source` and critical points along the animal movement pathways

• Hotspots = foci, endemic source

• Critical points = amplification point
Districts with FMD outbreaks 2007-2009
Cattle movement pattern vis-à-vis population and price
Roadmap Strategies

Second Strategy

• Pursue zoning in the most advanced area of FMD control
  – Set up control/eradication zones in priority areas once disease incidence decreased to low levels and the likelihood of recurrence is reduced.
FMD Zones in SE Asia and China
Roadmap Strategies

Third Strategy

• Maintain and expand FMD free zones
  – Zones which are currently free will be protected by increasing the focus on quarantine and movement management at zone or countries borders.
Maintenance and Expansion of FMD Free zones
PCP and OIE Endorsement of Official FMD Control Programmes

OIE Recognition of FMD free with or without vaccination

OIE Endorsement of Official FMD control programmes
PCP and SEACFMD 2020

1st Strategy: Reduction of FMD prevalence by targeting hotspots and critical points

2nd Strategy: Progressive zoning

3rd Strategy: Maintenance and expansion of FMD free zones
Indicative PCP stages identified at SEACFMD Sub-Commission

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<tr>
<th>Stage 1</th>
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![PCP stages diagram](image-url)
### Indicative PCP stages identified at SEACFMD Sub-Commission

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Stage 1: Cambodia, Lao PDR and Myanmar

• Better understanding of FMD viruses causing outbreaks
• Understanding animal movement
• Pilot vaccination
• Public awareness
• Legislation update
• Update of National FMD Plan
Stage 2: Vietnam

- Better understanding of FMD viruses causing outbreaks
- Understanding animal movement
- Strategic mass vaccination
- Public awareness
- Legislation update
- Established National FMD Plan funded with USD 31 Million from 2011 to 2015
Stage 3: China, Malaysia and Thailand

• Better understanding of FMD viruses causing outbreaks
• Understanding animal movement
  – Identification and traceability established
• Mass vaccination in China and strategic mass vaccination in Malaysia and Thailand
• Public awareness
• Legislation support
• Established National FMD Plan funded
• FMD Free zones existing
Capacity building for VS

OIE PVS Pathway: collaborating with governments, stakeholders and donors
+ Aquatic Animal Health Services

http://www.oie.int/eng/oie/organisation/en_vet_eval_tool.htm?e1d2
SEACFMD applicability to other TADs and Zoonoses

During the development of this Roadmap, references were made from various national experiences and several strategic plans and documents such as the Roadmap for an ASEAN Community 2009-2015, **SEAFMD 2020 Roadmap**, FAO Regional Strategy on HPAI and EIDs, Regional Strategy on the Progressive Control and Eradication of HPAI 2008-2010, etc.
“if you know your enemies and know yourself, you can win a hundred battles…”
STANDZ:
Stop Transboundary Animal Diseases and Zoonoses

HPED:
Highly Pathogenic Emerging Diseases
Acknowledgement

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  Dr Mary Joy Gordoncillo
  Dr Karan Kukreja
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  Lao PDR – Dr Phouth Inthavong and Dr Syseng Khounsy
  Myanmar – Dr Kyaw Sunn and Dr Cho Cho Thun
  Malaysia – Dr Mohd Naheed Bin Mohd Hussein and Dr Maznah Ahmad
  Philippines – Dr Victor Atienza
  Singapore – Dr Tze Hoong Chua
  Thailand – Dr Prasit Chaitaweesub and Dr Wacharapon Chotiyaputta
  Vietnam – Dr Phan Quang Minh
- OIE FMD Reference Laboratory- Pirbright
- OIE FMD Reference Laboratory Pakchong
- OIE FMD Reference Laboratory – Lanzhou
- OIE Collaborating Center for Laboratory Capacity – AAHL-Geelong
Thank you for your attention