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OIE Regional Representation for the Middle East

FMD Situation in the Middle East

12th Joint Permanent Committee of the REMESA
10-11 May 2016, Toledo, SPAIN
Contents

- FMD distribution in the Middle East
- Recent FMD outbreaks in the Middle East
- 3rd Regional meeting of the FMD Control Roadmap for the Middle East
FMD distribution in the Middle East
FMD reporting in the Middle East
2015 – 2016 (OIE / WAHIS)

Afghanistan
Egypt
Iran
Iraq
Kuwait
Libya
Oman
PAT
Qatar
Saudi Arabia
Somalia
Sudan
Turkey
UAE
Yemen

Bahrain
Cyprus
Djibouti
Jordan
Lebanon
Syria
### FMD serotypes in Middle East

(Pool 3 and Pool 4)

<table>
<thead>
<tr>
<th>POOL</th>
<th>REGION/COUNTRIES – colour pools as in Map</th>
<th>SEROTYPES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SOUTHEAST ASIA/CENTRAL ASIA/EAST ASIA</td>
<td>O, A and Asia 1</td>
</tr>
<tr>
<td></td>
<td>Cambodia, China (People’s Rep. of), China (Hong Kong, SAR), China (Taiwan Province), Korea (DPR), Korea (Rep. of), Laos PDR, Malaysia, Mongolia, Myanmar, Russian Federation, Thailand, Viet Nam</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>SOUTH ASIA</td>
<td>O, A and Asia 1</td>
</tr>
<tr>
<td></td>
<td>Bangladesh, Bhutan, India, Nepal, Sri Lanka</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>WEST EURASIA &amp; MIDDLE EAST</td>
<td>O, A and Asia 1</td>
</tr>
<tr>
<td></td>
<td>Afghanistan, Algeria, Armenia, Azerbaijan, Bahrain, Bulgaria, Egypt, Georgia, Iran, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Libya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Syrian Arab Republic, Tajikistan, Tunisia, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>EASTERN AFRICA</td>
<td>O, A, SAT 1, SAT 2 and SAT 3</td>
</tr>
<tr>
<td></td>
<td>Burundi, Comoros, Congo D. R., Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Rwanda, Somalia, Sudan, South Sudan, Tanzania, Uganda, Yemen</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>WEST/CENTRAL AFRICA</td>
<td>O, A, SAT 1 and SAT 2</td>
</tr>
<tr>
<td>6</td>
<td>SOUTHERN AFRICA</td>
<td>(O, A)*, SAT 1, SAT 2 and SAT 3</td>
</tr>
<tr>
<td></td>
<td>Angola, Botswana, Congo D. R., Malawi, Mozambique, Namibia, South Africa, Zambia, Zimbabwe</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>SOUTH AMERICA</td>
<td>O and A</td>
</tr>
<tr>
<td></td>
<td>Ecuador, Paraguay, Venezuela</td>
<td></td>
</tr>
</tbody>
</table>
FMD serotypes in Middle East

2005 - 2014 by semester
(OIE/WAHIS)

2012 - 03/2016
(FAO/EuFMD)

FMDV-O Afghanistan, Bahrain, Egypt, Iran, Iraq, Israel, Kuwait, Libya, Oman, PAT, Qatar, Sudan, Turkey, UAE, Yemen

FMDV-A Afghanistan, Egypt, Iran, Iraq, Sudan & Turkey

FMDV-Asia 1 Afghanistan, Iran & Turkey

FMDV-SAT 2 Egypt, Libya, Oman, PAT, Sudan
FMD circulating topotypes in Middle East
Pool 4 / A, O, SAT 1-2-3 serotypes / 2012 - 2015 (EuFMD)

Recent evolution

Expansion of SAT 2 topotype VII
After reaching North Africa in 2012 (Egypt, Libya) has spread to West Africa (Mauritania, 2014)
Middle East (Oman, 05/2015)
FMD circulating topotypes in Middle East

*Pool 3 / Serotype O / 2012 - 2015 (EuFMD)*

**Recent evolution**

- Lineage O/ME-SA/Ind-2001
- Dominant in the Indian sub-continent
- Has spread during 2013-15 to
- Middle East (Saudi Arabia, Bahrain, UAE),
- North Africa (Algeria, Morocco, Libya, Tunisia)
FMD circulating topotypes in Middle East
Pool 3 / Serotype A / 2012 - 2015 (EuFMD)

Recent evolution

Emergence of a new lineage A/ASIA/G-VII closely related to the FMD A/Asia/India 2001 circulating in the Indian subcontinent has spread in 2015-16 to Middle East & West Eurasia (Saudi Arabia, Iran, Turkey)
Recent FMD outbreaks in the Middle East
FMD outbreaks in the Middle East
April 2015 to March 2016 (Source OIE/WAHIS)
FMD outbreaks in the Middle East
April 2015 to March 2016 (Source OIE/WAHIS)

Emergence of lineage A / ASIA / G-VII

<table>
<thead>
<tr>
<th>Country</th>
<th>Date</th>
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<tbody>
<tr>
<td>Iran</td>
<td>30/08/15</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>13/09/15</td>
</tr>
<tr>
<td>Turkey</td>
<td>29/09/15</td>
</tr>
</tbody>
</table>
FMD in Iran

A/ASIA/G-VII
Last FMDV A in 2011

Start: 30/08/2015
Confirmed: 02/12/2015
Resolved: 07/10/2015

ASGARLOU, Jafriyeh, QOM
1 outbreak, 15 cattle / 1250

Quarantine, zoning, no treatment of affected animals

Vaccination of 28 800 cattle
(Merial/Razi polyvalent vaccine)
FMD in Saudi Arabia

A/ASIA/G-VII
Last FMDV-A outbreak in 2011

Start: 13/09/2015
Confirmed: 16/10/2015
Resolved: 15/11/2015

Durma, Riyadh
2 outbreaks
93 cattle and 30 sheep

Quarantine, zoning,
no treatment of affected animals,
Vaccination of 45 000 sheep & cattle
FMD in Turkey

A/ASIA/G-VII

Start: 29/09/2015
Confirmed: 05/10/2015
Continuing

3 outbreaks
AMASYA  Cattle  789
BITLIS  Cattle  460

Quarantine, zoning, no treatment of affected animals, **Vaccination of all animals**
FMD outbreaks in the Middle East
April 2015 to March 2016 (Pirbright WRLFMD)

Spread of lineage O/ME-SA/Ind-2001

Several isolations at Pirbright
Saudi Arabia
March 2016 (continuing)
UAE
Jan. 2016 in a gazelle
FMD outbreaks in the Middle East
April 2015 to March 2016 (Source OIE/WAHIS)

Spread of lineage O/ME-SA/PanAsia

Israël
November 2015
Kuwait
FMD in Israël
O/ME-SA/PanAsia

Start: 13/11/2015
Confirmed: 21/11/2015
Resolved: 07/12/2015

ZURI’EL, Acco, HAZAFON
2 outbreaks cattle + pigs

Quarantine, zoning, no
treatment of affected animals
Vaccination of 2 200
animals (Trivalent vaccine
A, O, Asia 1)
FMD in Kuwait

O / ME-SA / PanAsia-2BAL-00
Last FMDV O outbreak in 2012

Start: 25/01/2016
Confirmed: 02/02/2016
Continuing

12 outbreaks in Al Jarah district
611 cases / 6100 cattle
44 deaths (calves)

Quarantine, zoning, no treatment of affected animals,
Vaccination of 15 600 cattle against O, A, Asia 1 and SAT 2
3rd Regional meeting of the FMD Control Roadmap for the ME
3rd FMD Roadmap meeting for the ME
Doha, Qatar (1-3 Dec. 2015)
## FMD PCP situation progress in ME

*3rd OIE/FAO GF TADS regional consultative meeting (Doha, Qatar, 1-3 Dec 2015)*

<table>
<thead>
<tr>
<th>Stage 1 (pending):</th>
<th>Yemen</th>
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</thead>
<tbody>
<tr>
<td>Stage 1:</td>
<td>Palestine</td>
</tr>
<tr>
<td>Stage 2 (pending):</td>
<td>Bahraïn, Egypt, Iraq, Jordan, Lebanon, Oman, UAE</td>
</tr>
<tr>
<td>Stage 2:</td>
<td></td>
</tr>
<tr>
<td>Stage 3 (pending):</td>
<td>Kuwait, Qatar</td>
</tr>
</tbody>
</table>
No country has progressed further along the PCP.

Most countries qualified in PCP stage 2 with a different level of implementation of the stage related activities.

Some of those require further revision of their plan for gaining a better understanding of the FMD situation and socio-economic impact.

Technical assistance is needed in formulating such plans.
# FMD PCP situation progress in ME

<table>
<thead>
<tr>
<th>Country</th>
<th>03/2014</th>
<th>12/2015</th>
<th>Comments</th>
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</table>
| Egypt   | 2       | 2*      | - They prefer to consolidate stage rather than progress  
- Socioeconomic studies and value chain analysis in progress  
- Risk of under reporting despite awareness efforts  
- Mobile lab to improved diagnosis (PCR, ELISA)  
- Vaccination coverage need to be improved  
- More progress made since 2014  
- Request for PVS Follow up  
- They prefer to consolidate stage rather than progress  
**WG to review RBSP within 3 weeks** |
| Jordan  | 2*      | 2*      | - On-going sero-survey (results March 2016) to be shared  
- Motivate clinical reporting by private stakeholders  
- First draft of risk-based control strategy; to be updated according to the result of the sero-survey  
- Request for PVS Follow up  
**WG to provide feed-back on RBSP (3 weeks)**  
**Final RBSP to be provided (6 months)** |
| Lebanon | 2*      | 2*      | - Sero-survey (pre-vaccination to be shared with WG. Follow up with NSP study in young livestock (6-24 months)  
- Request for PVS Follow up is already submitted  
- Control Strategy is provided  
- No vaccination exit strategy because of regional situation  
**WG to provide feed-back on RBSP (3 weeks)** |
<table>
<thead>
<tr>
<th>Country</th>
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<th>12/2015</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Bahrain | 2       | 2*      | • Vaccination cattle sheep and goats twice a year  
• Protocol for importation and quarantine  
• Need to perform regular sero-survey and PVM  
• Enhance border control  
• Outbreaks in 2014 and 2015, samples submitted to Pirbright  
**Risk Based Strategic Plan submitted within 6 months**  
**Submit questionnaire within 1 month** |
| Kuwait  | 3       | 3*      | • Confident of their reporting system. Incentives.  
• NSP and serosurvey in cattle, not in small ruminants  
• Share results of sero-survey  
• Border control to be improved  
• Sheep vaccination should be mandatory (now is voluntary)  
• Advice PVS follow up  
**Submit nat. control plan & contig. plan within 6 months** |
| Iraq    | 2*      | 2*      | • May design and implement additional sero-survey, including a questionnaire to further understand the prevalence  
• ‘Control plan’ to be provided  
• Control activities in place but not risk-based  
• No PVS, but requested  
• Difficult security context  
**WG to facilitate submission of FMD samples to WRL**  
**WG to provide feed-back on RBSP (3 weeks)**  
**Final RBSP to be provided (6 months)** |
# FMD PCP situation progress in ME

<table>
<thead>
<tr>
<th>Country</th>
<th>03/2014</th>
<th>12/2015</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Qatar     | 3       | 3*      | • Provide evidence that FMD is not circulating  
• Animal identification system is in place  
• No Sero-survery, no PVM.  
• No sample submission to ref lab. Characterisation of virus relies on results from the region (Imported country)  
• Request for a PVS follow up  
**Risk Based Strategic Plan submitted within 6 months**  
**Submit questionnaires of stages 2 and 3 within 1 month** |
| Saudi Arabia | 2*      |         | • Vaccination voluntary. Not sufficient for elimination  
• Protocol for importation. Compliance?  
• Include socio-economic aspects in the RBSP  
• Provide the results of the ongoing serosurvey  
• Enhance implementation importing protocol  
• Movement restriction within the country is a challenge.  
• Cost-benefit analysis being done  
**Risk Based Strategic Plan submitted within 3 months**  
**Submit stages 1 and 2 questionnaires within 1 month** |
| UAE       | 2       | 2       | • Nat. control plan for 5 diseases to be endorsed by gov.  
• FMD in captive animals  
• Need coordination between local authorities and VS  
• NO data from the private sector on control activities  
• Request for PVS Follow up is already submitted  
**WG to provide feedback on RBSP (3 weeks)** |
Regional approach

- Establish (sub)-regional Epi-network & leading FMD laboratory;
- Organize training workshops on practical epidemiology for PCP in 2016/17;
- Strengthen the work of the Nat. Focal Points:
  - on Laboratories;
  - on Disease Notification;
- Strengthen the (sub)-regional networks (GCC, REMESA) and potentially enlarge them
FMD PCP situation progress in ME

Doha recommendations

Vaccine

- Review vaccination strategies;
- Organise trainings in vaccination programme development, monitoring and evaluation.

Preparedness

- Veterinary Services develop contingency plans for exotic FMDV from other virus pools (SAT 2).
Control of live animals at risk

- Promote use by VS of the OIE trade standards (certification, zoning, compartmentalization)
  -> Zoning conf. in Amman, Jordan, 3-5/04/16
- Importing countries inspections to evaluate quarantine stations at exporting BIPs
- Submit national control plans to OIE for endorsement (stage 3)
- Address FMD in trainings of the Nat. Focal Points on Wild Animal
PPR PCP situation progress in ME

2th FAO/OIE PPR-PCP regional Roadmap Meeting

3-6 October 2016 in Cairo or Amman (TBC)

Back to back with:

- Meeting of the GF TADS Regional Steering committee for the Middle East (TBC)
- OIE “Disease Status and Endorsed Control Programme Recognition Training”
FMD in Middle East: conclusion

1. Many FMDV circulating serotypes (O, A, Asia1, SAT-2)
2. Permanent risk of incursion of exotic FMDV from neighbouring FMDV pools 2, 4 & 5:
   - SAT 2/VII (2012-15) Pool 4
3. No efficient vaccine available against A/ASIA/G-VII.
4. ME countries are at different stages of managing FMD reflecting proper socio-economic and livestock sectors development.
5. ME countries have engaged a GF TADs PCP stepwise approach for the control and eradication of FMD in the region, in line with the Global Strategy.