



WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

**15th Conference of the
OIE Regional Commission for the Middle East**
Abu Dhabi, United Arab Emirates,
10 to 14 November 2019

Final Report





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15th Conference of the
OIE Regional Commission for the Middle East
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FINAL REPORT

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LIST OF ABBREVIATIONS

AAID:	Arab Authority for Agricultural Investment and Development
ADAFSA:	Abu Dhabi Agriculture and Food Safety Authority
AOAD:	Arab Organization for Agricultural Development
BESST:	Better Enforcement of Standards for Safer Trade
BSE:	Bovine spongiform encephalopathy
CaMeNet:	Camel Middle East Network
CITES:	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DALYs:	Disability Adjusted Life Years
EuFMD:	European Commission for the Control of Foot-and-Mouth Disease
FAO:	Food and Agriculture Organization of the United Nations
FMD:	Foot and mouth disease
GCC:	Cooperation Council for the Arab States of the Gulf
GF-TADs:	Global Framework for the Progressive Control of Transboundary Animal Diseases
HPAI:	Highly pathogenic avian influenza
ICFAW:	International Coalition for Animal Welfare
IHR:	International Health Regulations
INTERPOL:	International Criminal Police Organization
JEE:	Joint External Evaluation
MEF:	Monitoring and Evaluation Framework
NBWs:	National Bridging Workshops
OIE:	World Organisation for Animal Health
PPPs:	Public–Private Partnerships
PPR:	Peste des petits ruminants
PVS:	Performance of Veterinary Services
SDGs:	Sustainable Development Goals
TADs:	Transboundary Animal Diseases
UAE:	United Arab Emirates
WAP:	World Animal Protection
WCO:	World Customs Organization
WHO:	World Health Organization

15th Conference of the OIE Regional Commission for the Middle East
Abu Dhabi, United Arab Emirates, 10 to 14 November 2019.

1. Following the kind invitation of the Government of the United Arab Emirates, the 15th Conference of the OIE Regional Commission for the Middle East was held in Abu Dhabi from 10 to 14 November 2019.
2. On Sunday, 10 November 2019, prior to the Conference, an “Interactive workshop on the role of OIE Delegates in OIE Standards” was carried out with the objective of improving the understanding through participant-initiated discussions related to standards development and implementation of the value of engaging in the standard-setting process within the community of leaders in this region.
3. A total of 81 participants, comprising OIE Delegates and/or representatives of 11 Member Countries and senior officers from 7 regional and international organisations, attended the Conference. In addition, representatives of the private sector as well as private veterinary organisations from the region and from the host country were present.

Members of the Commission: Bahrain, Cyprus, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia, Syria, and United Arab Emirates.

International/regional organisations: AAAID¹, AOAD², EuFMD³, FAO⁴, ICFAW⁵, WAP⁶, WHO⁷.

4. Dr Majid Al Qassimi, OIE Delegate of the United Arab Emirates, Dr Mark Schipp, President of the OIE World Assembly of Delegates, Dr Monique Eloit, OIE Director General, Dr Ghazi Yehia, OIE Regional Representative for the Middle East, Dr François Caya, Head of the OIE Regional Activities Department, Dr Montserrat Arroyo, Deputy Head of the OIE Regional Activities Department, and Dr Gillian Mylrea, Head of the OIE Standards Department, also participated in the Conference. Dr Bouda Vosough Ahmadi, Livestock Health Economist at the EuFMD, also participated in the Conference as speaker of the Technical Item.

MONDAY 11 NOVEMBER 2019

Opening Ceremony

5. The opening ceremony was moderated by Dr Ghazi Yehia, OIE Regional Representative for the Middle East. The following authorities addressed welcome messages to the participants:
 - Dr Majid Al Qassimi, OIE Delegate of the United Arab Emirates;
 - Dr Elias Ibrahim, President of the OIE Regional Commission for the Middle East and Delegate of Lebanon;
 - Dr Mark Schipp, President of the OIE World Assembly of Delegates;
 - Dr Monique Eloit, OIE Director General.

¹ AAAID: Arab Authority for Agricultural Investment and Development

² AOAD: Arab Organization for Agricultural Development

³ EuFMD: European Commission for the Control of Foot-and-Mouth Disease

⁴ FAO: Food and Agriculture Organization of the United Nations

⁵ ICFAW: International Coalition for Animal Welfare

⁶ WAP: World Animal Protection

⁷ WHO: World Health Organization

6. The Conference was honoured by the presence of H. E. the Minister of Climate Change and Environment of the United Arab Emirates, Dr Thani Ahmed Al Zeyoudi who warmly welcomed all the participants to the Conference and to Abu Dhabi. His Excellency expressed the honour of his country to be the host of the new OIE Sub Regional Representation and the commitment of his country to closely collaborate with the OIE.
7. In the presence of the Minister, the OIE Director General, and H.E. the Director General of the Abu Dhabi Agriculture and Food Safety Authority (ADAFSA), Dr Saeed Al Bahri Salem Al Ameri, signed an agreement with provisions for the operationalisation of the programme of activities of the OIE Sub-Regional Representation in Abu Dhabi. This new office will mainly support the countries of the Gulf Cooperation Council and Yemen in the implementation of OIE activities including the Better Enforcement of Standards for Safer Trade (BESST) project.

Approval of the Agenda and Programme

8. The Provisional Agenda and Programme were adopted. (see the final programme in Appendix 1).

Appointment of the Conference Committee

9. The Conference Committee was elected by participants as follows:

Chairperson:	Dr Majid Al Qassimi (UAE)
Vice-Chairperson:	Dr Elias Ibrahim (Lebanon)
Rapporteur General:	Dr Christodoulos Pipis (Cyprus)

Appointment of Session Chairpersons and Rapporteurs

10. Chairpersons and Rapporteurs were designated for the Technical Item and the Analysis of the Animal Health Situation as follows:

Technical Item:	Dr Mahmoud Alhanatleh (Jordan), (Chairperson) Dr Fajer Al Sallom (Bahrein), (Rapporteur)
Analysis of the Animal Health situation:	Dr Sanad Alharbi (Saudi Arabia), (Chairperson) Dr Julanda Almawly (Oman), (Rapporteur)

The role of the OIE in supporting the Sustainable Development Goals: developing and improving collaborative partnerships

11. Dr Monique Eloit, OIE Director General, and Dr Mark Schipp, President of the OIE World Assembly of Delegates, delivered a joint presentation regarding “the role of the OIE in supporting the Sustainable Development Goals: developing and improving collaborative partnerships”.
12. Dr Eloit reminded participants of the 17 Sustainable Development Goals (SDGs), which call for action by all countries and interested parties to achieve a better and more sustainable future for all. She referred to the OIE’s Strategic Objectives (OIE 6th Strategic Plan), which clearly indicate the work being carried out by the Organisation to achieve a healthier and safer planet. She demonstrated how the OIE’s strategic objectives are closely aligned with SDGs and share a common global vision for the economic prosperity, social and environmental welfare of populations, by presenting some examples of the OIE’s actions and how these SDGs are addressed.

13. Dr Schipp presented on the current and future challenges faced by the Organisation in this transition phase as the OIE prepares to conclude the Sixth Strategic Plan and engage in the Seventh Strategic Plan. Dr Schipp referred to the open consultation that had taken place at the beginning of the year involving all OIE current and potential interested parties to obtain their suggestions/vision to feed the reflection process for the development of the OIE Seventh Strategic Plan. One of the main topics of interest highlighted by respondents to the open consultation was the need to develop and strengthen partnerships. Dr Schipp explained the OIE's vision in that respect and its strategy aimed at optimising cooperation with partners in the future.
14. Based on this presentation, the Regional Commission for the Middle East noted that:
- By supporting stronger national Veterinary Services, founded on principles of good governance and quality, the OIE contributes directly and indirectly to the SDGs;
 - The tools to strengthen Veterinary Services including those for the improvement of the collaboration between the Veterinary Services and the Public Health Services already exist (PVS Pathway, IHR MEF, JEE, Twinning Projects, and NBWs, among others);
 - The benefits of implementing OIE standards go beyond trade facilitation and play a role in achieving a sustainable food supply for the future, creating jobs, fighting poverty and hunger, and developing the economy. All these are fully aligned with the SDGs;
 - While the OIE has been mandated by its Member Countries to develop standards and guidelines to support Member Countries in the control of animal diseases and animal welfare, it is the responsibility of Member Countries to ensure the implementation of these guidelines and standards at national level;
 - SDGs cannot be achieved without investing in Veterinary Services;
 - There is an urgent need for Delegates to work in increasing the political will regarding the work of the OIE and the importance of ensuring animal disease control/eradication at national and regional level;
 - The work of the OIE in partnerships helps achieve SDGs as is well recognised thanks to the work done, among others, through the Tripartite collaboration with WHO and FAO under the "One Health" concept. Delegates can make reference to this collaboration when sensitising high-level authorities regarding the important work done by the OIE;
 - Prioritising is key when sensitising high level authorities, mainly when it comes to creating momentum to get the attention of leaderships, it also encourages staff to better plan their activities, to manage workloads and focus on key issues with indicators;
 - The OIE will undertake a deeper analysis to better showcase its contribution to the SDGs. This will aim at better informing the leaders of its Member Countries and partner organisations and provide detailed information that could be used to sensitise the high-level authorities at national level;
 - Establishing impactful and sustainable partnerships can certainly improve the quality of Veterinary Services;
 - Current and future challenges being faced by the Organisation include, among others, a competitive international trade environment, technological advancements, ensure multisectoral collaboration, improve preparedness to respond to a rapidly evolving global context, ensure sustainable and appropriate financing, and the need to raise awareness of the OIE;
 - The OIE has a central role to play in responding to today and tomorrow's global challenges; thus, it needs to ensure multisectoral collaboration, capitalise on stakeholder capacities, through public-private partnerships (PPPs), and by strengthening and broadening its network of strategic partners;
 - The OIE is working to be considered as a potential partner for other organisations; thus, it is key for the Organisation to work on an adapted result-based communication strategy to increase its visibility through partnerships.

**Presentation by the
Ministry of Climate Change and Environment of the
United Arab Emirates, including details of the
OIE Sub-Regional Representation in Abu Dhabi**

15. Dr Majid Al Qassimi, OIE Delegate of the United Arab Emirates, delivered a presentation on behalf of the Ministry of Climate Change and Environment of the United Arab Emirates. The presentation focused on the current cooperation activities with the OIE, comprising activities with the Camel Middle East Network (CaMeNet), the Twinning project aimed at developing a Collaborating Centre for camel diseases, the two Reference Laboratories in the UAE (Camel pox; Brucella and Glanders) and the Collaborating Centre for Quality Management systems. All these activities are in line with various objectives to support regional capacity, mainly for the improvement of scientific and technological capacities in epidemiology, diagnostics and research.
16. Dr Al Quassimi also informed on the activities to be covered by the OIE Sub-Regional Representation office for the GCC⁸ and Yemen, the objective of which will be to coordinate the implementation of OIE international standards with a view to reinforce the capacity of Veterinary Services for the control and management of animal diseases, notably transboundary animal diseases, and animal welfare. This office will initially provide support the Better Enforcement of Standards for Safer Trade (BESST) initiative and will work on digitalisation in animal health.

Animal Welfare in the United Arab Emirates

17. Dr Ahmed Zahran, UAE Animal Welfare Focal Point, briefly presented on the activities carried out in the country in order to address animal welfare. He highlighted, among others, the federal laws developed, the ministerial resolutions on animal welfare as well as the participation of the country in the different OIE activities including the Global Conference for Animal Welfare and the Animal Welfare Forum. Additionally, he commented on the Animal Welfare Action Plan of the Middle East, discussed and validated during the OIE Regional Seminar for Focal Points on Animal Welfare that took place in Amman, Jordan in 2016, and endorsed by the Regional Commission during the 84th OIE General Session. This Plan is due to be revised soon.

**Analysis of the Animal Health Situation
in the Region in 2018 and 2019**

18. Following the presentation on the Analysis of the Animal Health Situation in the Region, made remotely by Dr Paula Cáceres, Head of the OIE World Animal Health Information and Analysis Department (report available in Appendix 2), the OIE Regional Commission for the Middle East noted that:
 - With regards to reporting by the Middle East Region, Members of the region recognised the need for improvements in terms of compliance with the reporting obligations and timeliness in submitting requested information. Members of the region acknowledged the lower submission rate for six-monthly reports compared to that of the rest of the world and the longer average delay for the submission of immediate notifications. At the same time, the quality and amount of quantitative information provided for terrestrial animal diseases reported present were, on average, better in the Middle East than in the rest of the world. The countries and territories of the Middle East Region were strongly encouraged to continue their efforts to submit timely, complete and accurate information in their reports.

⁸ GCC: Cooperation Council for the Arab States of the Gulf

- Regarding avian diseases, the OIE highlighted the region's good performance on reporting highly pathogenic avian influenza (HPAI) in poultry, in terms of disease evolution, control measures and diagnostics. Members were encouraged to follow the same procedure and good reporting behaviour for the other listed avian diseases, including updating diagnostic information in the annual report. In the spirit of international solidarity, countries and territories of the Middle East Region with optimal diagnostic capacities were encouraged to aid other countries with lower levels of resources in this respect, both within and beyond the region.
- With regards to equine diseases, a good level of reporting was observed for the control measures applied in the region for the diseases selected for analysis in the report, glanders being the disease with the highest proportion of countries applying surveillance. However, it was noted that the diagnostic capacity reported for the selected equine diseases in the region was quite low, except for glanders. The OIE highlighted the paucity of data available for OIE-listed equine diseases in the region and therefore encouraged Members to review the reporting of these diseases in future six-monthly reports.
- Regarding diseases of ruminants, it was noted that foot and mouth disease (FMD) was widely distributed in the region, with four circulating serotypes (O, A, Asia1, and SAT2). Very good quality information was available in terms of FMD distribution, quantitative data and the control measures applied. However, the diagnostic capacity reported for FMD in the region was not very high. Peste des petits ruminants (PPR) was also widespread in the Middle East Region, and very few countries reported the disease as absent. Accuracy in quantitative information on PPR distribution and diagnostic capabilities should be improved. In view of the above findings, countries and territories in the region were encouraged to continue their efforts on reporting their FMD situation and the control measures applied, and to similarly improve the reporting of PPR-related information in order to support the global eradication programme.
- Regarding rabies, the OIE highlighted the good level of reporting on the rabies situation in the region and the good quality of the information provided, but at the same time recommended that Members strengthen their engagement in "Zero by 30: The Global Strategic Plan to Prevent Human Deaths from Dog-Transmitted Rabies by 2030", in particular by improving rabies surveillance capabilities and vaccination coverage to reduce the spread of the disease.

Risk communication and emergency management of emerging and transboundary animal diseases in the region

19. The presentation by Dr Paolo Calistri, Head of the Epidemiology Unit of the *Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale"*, enabled the OIE Regional Commission for the Middle East to note that:
- Risk communication is a two-way process and must not be confused with a one-way information campaign. It implies early involvement of stakeholders and target audiences in the decision process.
 - Effective risk communication is a strategic aspect of emergency management and must therefore be included in contingency plans together with all other topics concerning the management of emergency situations.
 - Since people perceive risks in different ways, risk-perception aspects relating to target audiences and stakeholders must be considered by risk managers in any risk communication strategy.
 - At institutional level, the establishment of an effective risk communication strategy should be based on a well-defined risk communication plan.
 - OIE Delegates are encouraged to nominate OIE Focal Points on Communication, if not already done, and encourage them to participate actively in the capacity building activities provided by the OIE. The trainings provided by the OIE are designed to ensure Focal Points have practical understanding of tools that can be used not only in peace times but also in times of crisis.

Brucellosis prevention and control in the Mediterranean and Middle East region

20. Prof. Darem Tabbaa, from the Department of Veterinary Public Health of the Faculty of Veterinary Medicine of Syria, provided detailed information on brucellosis and noted that it remained a major public health problem in the Mediterranean and Middle East region and was responsible for significant economic losses.
21. The OIE Regional Commission for the Middle East concluded that:
- Brucellosis is a neglected disease in the region and, taking into account the transboundary nature of the disease, the Middle East region should consider regional mechanisms for its control and management through the GF-TADs;
 - Prioritising brucellosis control over the control of other diseases should be based on an estimate of the human health burden, expressed as disability adjusted life years (DALYs), and the measurement of the resulting monetary impact, i.e. economic losses due to human illness and decreased livestock productivity;
 - An appropriate inter-sectorial and comprehensive surveillance system should be established to better monitor the disease in the South Mediterranean and Middle East region;
 - A well-designed regional inter-sectorial surveillance and monitoring system could assess the real burden of the disease in humans and animals, as the basis on which to plan comprehensive and effective brucellosis control policies;
 - Some of the elements of control strategies to be considered are:
 - Introduction of extensive and effective vaccination programmes for susceptible livestock (cattle, sheep, goats and, where appropriate, buffaloes and camels) (S19 or RB51 for cattle, Rev1 for small ruminants);
 - Good Veterinary Services' with regular laboratory support;
 - Measures to control the contamination of food of animal origin with *Brucella* spp;
 - Expansion of milk pasteurisation;
 - In terms of the detection and control of human cases, it is important to consider:
 - Agricultural extension and public health education;
 - Recruiting different forms of mass media to run persistent, extensive and structured public health education campaigns addressing, for instance, boiling of milk and avoiding consumption of raw milk, fresh white cheese and unpasteurized ice cream;
 - Intersectoral collaboration and coordination among national Public Health and Veterinary Services as well as establishing effective collaboration with the competent Services of other countries, particularly those in the same region;
 - Additional control strategies that could be considered are:
 - the test-and-slaughter strategy, which might gradually lead to the elimination of infection and the establishment of modern livestock farms;
 - the preservation of public health and alleviation of social and economic burdens.

Report on current and future activities of the OIE Regional Representation for the Middle East and presentation of the new OIE Regional website

22. Dr Ghazi Yehia, OIE Regional Representative for the Middle East, presented the activities of the OIE Regional Representation during the year and provided details of the planned activities for 2020, highlighting, among others, the activities related to PPR, animal welfare and FMD global strategies as well as work being done to renovate the regional website. He also commented on the opening of the new OIE Sub-Regional Representation in Abu Dhabi.

**Technical Item
Public–Private Partnerships (PPP)
for efficient sustainable animal health systems and
Veterinary Services**

23. The Technical Item on “Public–Private Partnerships (PPP) for efficient sustainable animal health systems and Veterinary Services”, introduced by Dr Isabelle Dieuzy-Labaye, OIE Senior Advisor on Public-Private Partnerships, and presented by Dr Bouda Vosough Ahmadi, Livestock Health Economist at the EuFMD, prompted a lively discussion among the participants, which is reflected in the recommendation elaborated by the OIE Regional Commission for the Middle East (see Recommendation in Appendix 3).

**Prion disease in dromedary camels:
a possible emerging risk for the Middle East?**

24. Dr Salama Al Muhairi from the Veterinary Laboratories Division of the Abu Dhabi Agriculture and Food Safety Authority and Dr Umberto Agrimi from the Italian National Health Institute, gave a joint presentation providing the Regional Commission with general information on the CAMENET and its activities along with the state of the art in terms of the current knowledge and the missing information regarding prion disease in dromedary camels. They also provided the region with suggestions to address the gaps through research, including the support that CAMANET could provide to gather scientific evidences to allow a proper and better assessment of the risk associated to the disease. They also provided suggestions of activities that countries could start implementing to start addressing this issue.
25. The OIE Regional Commission for the Middle East noted that:
- Many information still missing regarding camel prion disease, tracking back its cause is very difficult, and it is almost impossible to figure out its origin. It is not even clear if its origin is linked to another prion animal disease. Its epidemiology is also unknown;
 - Preliminary results suggest that the prion strain of the prion camel disease is different from scrapie and BSE;
 - It is a problematic disease as so far there are no diagnostic or preclinical tests available, nor treatments;
 - Member Countries must be careful when interpreting clinical signs alone as several diseases manifest through neurological symptoms;
 - Considering the unknown contagious nature of the disease, Member Countries still need to be prepared to manage possible positive results and thus, it is key to start working on developing a formal contingency plan, clearly detailing the procedures to be followed if facing an outbreak;
 - A proposal of working document was provided by CAMENET to address the main areas of support such as: research, surveillance, capacity building and preparedness, as well as risk assessment;
 - Italy through the European Reference Laboratory and the OIE Reference Laboratory for prion diseases are ready to collaborate with CAMENET to better support countries.

**New strategic plan for FMD
and similar TADs (Hold-FAST)**

26. Dr Fabrizio Rosso, Deputy Secretary of the EuFMD, provided participants with details of the new strategic plan for FMD and similar TADs⁹ (Hold-FAST).
27. The Regional Commission for the Middle East noted the following points:
- A better knowledge of the livestock flows in the region would be a major advance for the assessment of animal disease threats and would provide useful information for designing more effective national disease surveillance and control programmes. Knowledge of the livestock flows, and their drivers should therefore be improved, accompanied by relevant qualitative risk analysis and risk mapping.
 - The capacity for early detection of incursions by FMD and similar TADs depends largely on the sensitivity of the primary surveillance, the effectiveness of the disease reporting system and the active surveillance implemented at risk hotspot areas. Outbreak investigation and sample submission remain essential to support the continued monitoring of circulating viruses and the provision of accurate vaccine matching advice.
 - The collection and sharing of risk information between neighbouring countries can facilitate the regular updating of the risk assessment carried out at national and regional level. The sharing of risk information, best practices, operational procedures and study results can enhance collaboration between countries for the control of TADs and the safe trade of animals and animal products.
 - The coordination of efforts and networking between laboratory and epidemiology experts, centres of expertise and regional technical institutions can contribute to the enhancement of national and regional expertise for the development and implementation of better surveillance systems and improved support to risk-based control strategies.
 - A capacity-building programme delivered through face-to-face training and e-learning can allow the national Veterinary Services and laboratories to gain more sustainable and long-term capacity to better understand the impact of TADs, implement risk-based control measures, detect early stages of the circulation of new viruses, enhance emergency response and identify options to reduce risk.
 - Availability of quality vaccines and implementation of effective vaccination strategies are essential to protect livestock and livelihoods. Vaccination programmes make up a great proportion of the resources for disease control in terms of money, time and human resources. Appropriate assessment of vaccine quality and the effectiveness of vaccination programmes is an important aspect of the evaluation of the control strategies implemented.
 - Socio-economic studies have proven the cost-benefit of undertaking vaccination campaigns compared to facing outbreaks.
 - Member Countries should take advantage of Reference Laboratories to well-characterize circulating FMD strains.

⁹ TADs: transboundary animal diseases

**Developing an OIE Aquatic Animal Health Strategy
collaboration, sustainability, our future**

28. Dr Ed Peeler, Vice President of the Aquatic Animal Health Standards Commission, and Dr Gillian Mylrea, Head of the OIE Standards Department, facilitated the session on 'Developing an OIE Aquatic Animal Health Strategy – collaboration, sustainability, our future'. Dr Monique Eloit, OIE Director General, opened the session and discussed the background to the development of the OIE Aquatic Animal Health Strategy and the corresponding Action Plan. Dr Peeler followed with a presentation on the importance of aquaculture worldwide and in the Middle East region and the challenges that need to be overcome if aquaculture is to meet the current demands as a protein source to feed the growing human population. Dr Peeler mapped some proposed thematic areas that could be addressed in the OIE Aquatic Animal Health Strategy currently under development, to improve the management of aquatic animal health and promote sustainable aquaculture production. Dr Mylrea led an interactive session during which participants worked in small groups to provide feedback on these proposed thematic areas.
29. The detailed outcomes from the group discussions and feedback were collected by the OIE and will serve to feed the reflection process for the development of the OIE Aquatic Animal Health Strategy.

**The trade of wildlife in the framework of the Convention on
International Trade in Endangered Species of Wild Fauna and Flora (CITES):
general regulations, legal and illegal trade, protected species and
link with the OIE**

30. A presentation from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat provided participants with details on its work, including the economic sectors targeted by the trade convention. Some misconceptions about CITES were clarified, mainly that CITES deals only with international trade including welfare aspects for certain species. It aims at regulating international trade in specimens of over 36000 wild animal and plant species in order to make it legal, sustainable and traceable. Details were provided on how CITES works to facilitate trade and reduce illegal wildlife trade.
31. Regarding the challenges identified, the Regional Commission noted the:
- Increasing scale and changing nature of wildlife crime;
 - Highly lucrative illicit activity involving transnational organised criminal groups and corruption;
 - The immediate risk it poses to both wildlife, people and their livelihoods;
 - The need for sufficient financial and human resources to combat illegal wildlife trade;
32. Regarding the ways to combat illegal trade in wildlife, the following suggestions were provided:
- Strengthen the controls on trade in wildlife and verify CITES documents;
 - Treat wildlife and forest crime as serious crime - in legislation and through relevant agencies;
 - Enforce legal efforts to improve results in seizures, arrests, prosecutions, convictions and strong penalties;
 - Strengthen the cooperation and coordination among law enforcement agencies and CITES authorities at national, sub-regional, regional and international level;
 - Exchange information/criminal intelligence between source, transit and destination countries, through the INTERPOL and WCO;
 - Use the full range of enforcement tools such as anti-money laundering, asset recovery and controlled delivery; and
 - Improve the investigative techniques.

33. Details were also provided regarding the cooperation agreement between CITES and the OIE signed in 2015 to address:
- Animal health and welfare standards for safe international trade and transport of wild animals;
 - Animal health and welfare standards for killing of wild animals for subsequent trade;
 - Safe and fast transport of biological samples (for diagnosis, identification, prevention, among others)
34. Feedback was requested to the Delegates on the issues presented, particularly regarding seizure of wildlife and facilitation on biological specimen transportation.

Discussion of the recommendation

35. The draft Recommendation on the Technical Item, finalised with the support of a drafting group composed by the Delegates of Bahrain, Jordan, and Saudi Arabia, as well as the representative from AAAID, was presented to participants and put forward for discussion. It will be submitted for adoption at the Thursday session with amendments as per participants' suggestions and discussions.
36. Following adoption by the Regional Commission, the recommendation will be submitted for endorsement by the World Assembly of OIE Delegates in May 2020. Once endorsed by the Assembly, it will serve as an important guideline for Member Countries of the OIE Regional Commission for the Middle East, as well as for the Organisation as a whole.

WEDNESDAY 13 NOVEMBER 2019

Cultural visit

37. Participants greatly appreciated the cultural visit organised by the host country. Sincere thanks were extended to the organisers for their kind hospitality.

THURSDAY 14 NOVEMBER 2019

Proposal for designation of a new OIE Collaborating Centre (UAE)

38. Dr Majid Al Qassimi, OIE Delegate of the United Arab Emirates, presented to the Regional Commission with an application for the OIE to consider the Abu Dhabi Agriculture and Food Safety Authority (ADAFSA) as a new OIE Collaborating Centre for Quality Management Systems.
39. Dr Salama Al Muhairi, Director of the Veterinary Laboratories Department of ADAFSA, provided a brief review of ADAFSA and its activities.
40. All the information was provided in advance to the Delegates of the Region in order to facilitate the revision of the proposal.
41. The Commission approved the proposal from the United Arab Emirates.

**Proposal of date and venue for the
16th Conference of the OIE Regional Commission
for the Middle East**

42. Regarding the 16th Conference of the OIE Regional Commission for the Middle East, Delegates of Bahrain, Saudi Arabia and Iran expressed the wish for their countries to host the next Conference which will be held in September 2021.
43. Such proposals should be considered in the discussions to take place during the meeting of the Regional Commission during the 88th General Session, in May 2020, for a final decision of the Regional Commission regarding the venue of its next Conference.

**Adoption of the Draft Final Report and
the Recommendation**

44. An electronic version of the draft final report was sent to all participants to facilitate the comments to the report.
45. Dr Monique Eloit, OIE Director General, explained the procedures for adopting the report and the recommendation of the Conference. Comments on the report received at the OIE Headquarters by 29 November 2019 would be taken into consideration. However, the recommendation had to be adopted during the current session and could not be changed subsequently, only editing being accepted.
46. The draft recommendation was adopted, with minor amendments considering participants suggestions and discussions.

Closing ceremony

47. Dr Monique Eloit, OIE Director General, thanked all the participants to the Conference, OIE Delegates and members of delegations, international and regional organisations, partners and observers, for their active participation during the week. She noted that the meeting was very productive and inputs, as per recorded in the recommendation adopted by the Commission and the final report of the Conference, were very valuable and will contribute to the whole organisation, especially in this period of reflection to complete the development of the Seventh Strategic Plan. She thanked the speakers for their excellent work and time devoted to the preparation of their presentations. She then thanked the staff from ADAFSA for ensuring the success of such an important event for the region, for the interesting visit proposed to participants, as well as the traditional dance and food that allowed participants to bring home nice memories from United Arab Emirates culture.
48. Dr Eloit made especial mention to the signature of the Letter of Intent between the OIE and ADAFSA which marked the start of important cooperation agreement between the OIE and the United Arab Emirates, thanks to the opening of the new OIE Sub-Regional Representation office in Abu Dhabi that will undoubtedly, support a better implementation and follow up of OIE activities in the region.
49. Dr Mark Schipp, President of the OIE World Assembly of Delegates, reiterated his thanks and congratulations to the government of the United Arab Emirates for the excellent organisation of the Conference and the warm welcome and hospitality offered to all participants.
50. Dr Majid Al Qassimi, OIE Delegate of the United Arab Emirates, expressed his gratitude, on behalf of his government and on his own, to all the participants, the speakers and the OIE staff for the productive Conference. He wished participants a safe trip back home and hoped that the stay in Abu Dhabi was pleasant.
51. Dr Al Qassimi declared the Conference officially ended at 10.00 a.m.

PROGRAMME

SUNDAY 10 NOVEMBER 2019

- 8:00 a.m. – 9:00 a.m. Registration of Delegates and distribution of documents for both the Workshop and the Regional Conference
- 9:00 a.m. – 5:00 p.m. Interactive workshop on the role of OIE Delegates in OIE Standards (**restricted to** OIE Delegates + one technical staff per country)
- 4:00 p.m. – 6:00 p.m. Registration of participants and distribution of documents for the Regional Conference

MONDAY 11 NOVEMBER 2019

- 8:00 a.m. – 9:00 a.m. Registration of participants and distribution of documents for the Regional Conference (cont.)
- 9:00 a.m. Opening ceremony and welcome remarks by the OIE Authorities
- 9:30 a.m. Approval of the Agenda and Programme
Appointment of the Conference Committee (Chairperson, Vice-Chairperson and General Rapporteur)
Appointment of session chairpersons and rapporteurs (Technical items and Animal Health Situation)
- 9:45 a.m. The role of the OIE in supporting the Sustainable Development Goals: developing and improving collaborative partnerships (Dr Monique Eloit, OIE Director General, Dr Mark Schipp, President of the OIE World Assembly of Delegates)
- 10:15 a.m. Discussion
- 10:45 a.m. Presentation by the Ministry of Climate Change and Environment of the United Arab Emirates including details of the OIE Sub-Regional Representation in Abu Dhabi (Dr Majid Al Qassimi, OIE Delegate of the United Arab Emirates)
- 11:15 a.m. Coffee Break
- 11:45 a.m. Animal Welfare in the United Arab Emirates (Dr Ahmed Zahran, UAE Animal Welfare Focal Point)
- 12:15 a.m. Analysis of the Animal Health Situation in the Region in 2018 and 2019 (Dr Paula Cáceres, Head of the OIE Animal Health Information and Analysis Department)
- 1:00 p.m. Discussion
- 1:15 p.m. Lunch

- 2:15 p.m. Welcome remarks by His Excellency the Minister of Climate Change and Environment of the United Arab Emirates
- 2:45 p.m. Group Photo
- 3:00 p.m. Risk communication and emergency management of emerging and transboundary animal diseases in the region (Dr Paolo Calistri, Head of the Epidemiology Unit, *Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale"*)
- 3:30 p.m. Discussion
- 4:00 p.m. Coffee break
- 4:30 p.m. Brucellosis prevention and control in the Mediterranean and Middle East region (Dr Darem Tabbaa, Department of Veterinary Public Health, Faculty of Veterinary Medicine, Syria)
- 5:00 p.m. Discussion
- 5:30 p.m. Report on current and future activities of the OIE Regional Representation for the Middle East and presentation of the new OIE Regional website (Dr Ghazi Yehia, OIE Regional Representative for the Middle East)
- 6:00 p.m. End of the session
- 7:30 p.m. Reception hosted by OIE

TUESDAY 12 NOVEMBER 2019

- 9:00 a.m. Technical Item: Public-Private Partnerships (PPP) for efficient sustainable animal health systems and Veterinary Services (Dr Bouda Vosough Ahmadi, Livestock Health Economist, European Commission for the Control of Foot-and-Mouth Disease)
- 9:45 a.m. Discussion
- 10:15 a.m. Prion disease in dromedary camels: a possible emerging risk for the Middle East? (Dr Salama Al Muhairi, Director of the Veterinary Laboratories Department at Abu Dhabi Agriculture and Food Safety Authority (ADAFSA)/ Dr Umberto Agrimi, Director, Department of Food Safety, Nutrition and Veterinary Public Health, Italian National Health Institute)
- 10:45 a.m. Discussion
- 11:15 a.m. Coffee break
Preparation of Recommendation by designated small group
- 11:45 a.m. FMD and similar TADs new strategic plan (Hold-FAST) (Dr Fabrizio Rosso, Deputy Secretary, European Commission for the Control of Foot-and-Mouth Disease (EuFMD))
- 12:15 a.m. Discussion
- 12:45 p.m. Lunch
- 2:00 p.m. Developing an OIE Aquatic Animal Health Strategy – collaboration, sustainability, our future (Dr Gillian Mylrea, Head of the OIE Standards Department / Dr Edmund Peeler, Vice-President OIE Aquatic Animal Health Standards Commission)
- 3:30 p.m. Coffee break

- 4:00 p.m. The trade of wildlife in the framework of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): general regulations, legal and illegal trade, protected species and link with the OIE (Representative from CITES)
- 4:30 p.m. Discussion
- 5:00 p.m. Discussion of recommendations
- 5:30 p.m. End of the session

WEDNESDAY 13 NOVEMBER 2019

- 9:00 a.m. – 12:00 p.m. Follow-up on the Feasibility study for a Better Enforcement of Standards for Safer Trade (BESST) initiative for OIE countries in the Horn of Africa and the Arabian Peninsula
- 12:30 p.m. Technical and cultural visit

THURSDAY 14 NOVEMBER 2019

- 09:00 a.m. Proposal for designation of a new OIE Collaborating Centre (UAE)
- 09:30 a.m. Proposal of date and venue of the 16th Conference of the OIE Regional Commission for the Middle East
- 09:45 a.m. Break
- 10:15 a.m. Adoption of the Draft Final Report and the Recommendation
- 11:00 a.m. Closing ceremony

ANALYSIS OF THE ANIMAL HEALTH SITUATION IN THE REGION IN 2018 AND 2019
(Update 6 August 2019)

*World Animal Health Information and Analysis Department,
Montserrat Arroyo, Peter Melens, Lina Mur, Paolo Tizzani and Paula Caceres*

This report is based on information obtained from six-monthly reports, annual reports, immediate notifications and follow-up reports submitted to the OIE through the World Animal Health Information System (WAHIS) by the 21 countries and territories of the Middle East¹, up to 6 August 2019. Special attention is given to the 2018 and 2019 reporting period.

The first part of the report reviews the overall reporting performance of the Middle East Region in comparison with the rest of the world, in terms of the timeliness and quality of reporting in recent years. The second part of the report provides a detailed analysis of selected diseases of critical importance, including the quality of their reporting, the surveillance methods applied, and the relevant control measures and diagnostic tests reported through WAHIS.

OVERALL REPORTING PERFORMANCE OF THE MIDDLE EAST REGION

The overall reporting performance of the Middle East Region was analysed and compared with the rest of the world using a set of performance indicators. These were grouped into three categories: (i) total number of reports submitted; (ii) timeliness of reporting; and (iii) quality of reporting.

These indicators were calculated using data from the two main types of mandatory reports submitted to the OIE that concern animal health, namely exceptional reports (immediate notifications and follow-up reports) and the two types of six-monthly reports (for terrestrial and aquatic animal diseases, respectively). For each category of indicators, the results for the Middle East Region's reports were compared with the results for the rest of the world, firstly for immediate notifications and follow-up reports and secondly for six-monthly reports. Considering that the statistics presented include both OIE Members and a non-member (the latter having no official reporting obligations to the OIE), the overall purpose of the comparison is not to derive any statistically significant difference between regions but simply to describe the Middle East Region's performance and compare it to the overall performance of the rest of the world, which thus serves as a reference value.

1. TOTAL NUMBER OF REPORTS SUBMITTED

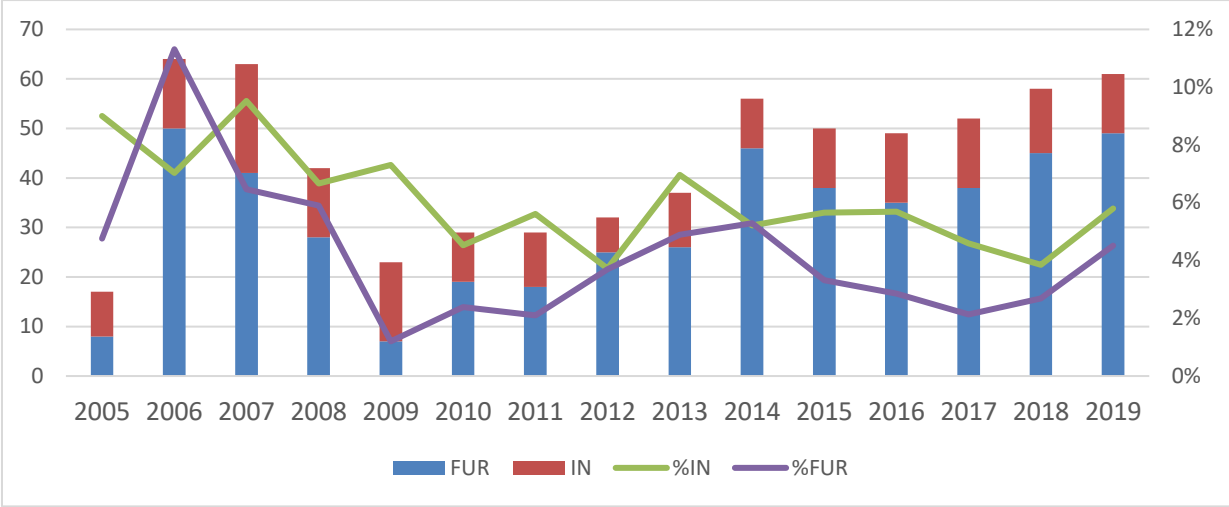
1.1. Immediate notifications and follow-up reports

Between 1 January 2018 and 6 August 2019, 25 immediate notifications and 94 follow-up reports were submitted by countries and territories of the Middle East. As shown in Figure 1, the number of exceptional reports per year has been very stable since 2014. A major peak in the number of reports submitted was observed in 2006 and 2007 related to the numerous reports of foot and mouth disease (FMD), highly pathogenic avian influenza (HPAI) and Newcastle disease. In the following two years the number of reports from the Region decreased drastically, before increasing again and reaching the current total of around 50-60 reports per year. Since 2015, the Middle East has submitted an average of 40 follow-up reports and 12 immediate notifications per year.

The reports from the Middle East accounted for 5% of all immediate notifications and 4% of all follow-up reports received through WAHIS between 1 January 2018 and 6 August 2019. The diseases most commonly notified in the Region during this period, were HPAI (poultry and birds other than poultry) (44% of immediate notifications and 66% of follow-up reports submitted), followed by FMD and bluetongue (each of them with 12% of immediate notifications and 11% follow-up reports submitted)

¹ The 20 Member Countries of the OIE Regional Commission for the Middle East and Palestine

Figure 1: Evolution in the annual number of immediate notifications (IN) and follow-up reports (FUR) submitted by the Middle East over time (between 2005 and 6 August 2019) and the percentage of IN and FUR worldwide contributed by the Middle East



1.2. Six-monthly reports

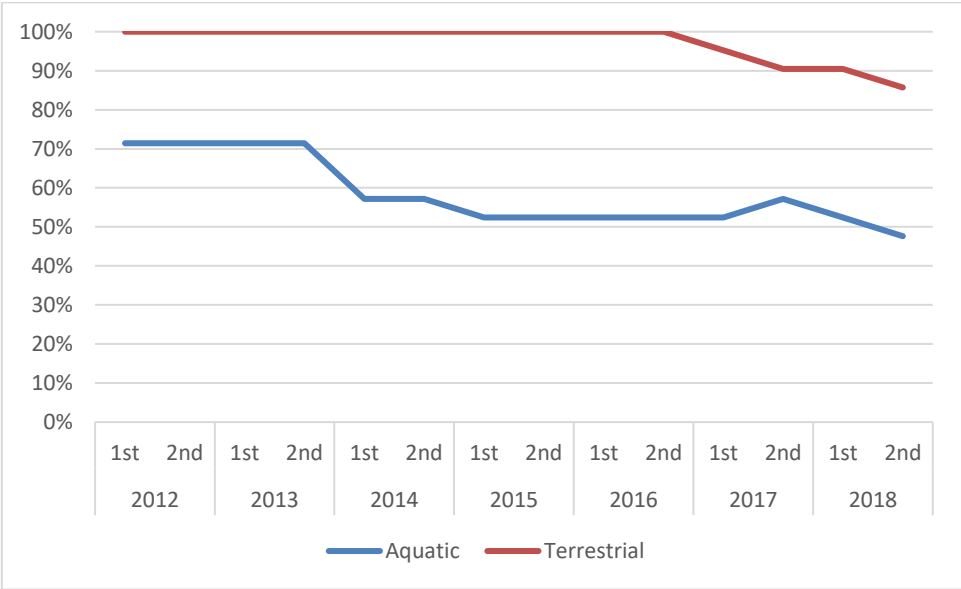
As of 6 August 2019, 91% (19/21) of countries and territories in the Middle East Region had submitted the first six-monthly report for 2018 on terrestrial animal diseases and 86% (18/21) had submitted both six-monthly terrestrial reports. However, the submission rates for the aquatic animal disease reports were considerably lower, only 57% (12/21) of the countries and territories in the Region having submitted their first six-monthly-report for 2018 and 52% (11/21) having submitted both six-monthly reports.

The submission rates for the Middle East were lower than the average rates for the rest of the world for every type of six-monthly report. These differences were minimal for the terrestrial reports (94% in the rest of the world vs 91% in the Middle East for the first semester and 87% vs 86% in the Middle East for the second semester). However, the gap was higher for the aquatic six-monthly reports (66% in the rest of the world vs 57% in the Middle East for the first semester), revealing a low level of compliance with the submission of aquatic reports.

The trend of submission rates for the Middle East since 2012 (year in which the aquatic and terrestrial reports started to be submitted separately) has been very stable for the terrestrial reports, with all the countries and territories of the Region submitting the mandatory terrestrial reports until 2017. However, in the past two years a few countries (maximum of three countries or territories per year) have not submitted their terrestrial reports or aquatic reports. Aquatic report submission rates reached 70% until 2013, but since then the rate has gradually decreased, with 11 countries and territories currently not submitting their six-monthly aquatic reports.

Based on the observed results, countries and territories of the Middle East are strongly encouraged to make all necessary efforts to submit their aquatic reports and, if possible, provide any missing historical information relating to previous years.

Figure 2: Trend in submission rates for six-monthly reports (terrestrial and aquatic) by countries and territories in the Middle East Region during the period 2012 – 2018



2. TIMELINESS OF REPORTING

2.1. Immediate notifications and follow-up reports

Article 1.1.3. of the OIE *Terrestrial Animal Health Code* and *Aquatic Animal Health code* (hereafter the OIE Codes) stipulates that, in accordance with relevant provisions in the disease-specific chapters, the time limit within which OIE Members are required to submit an immediate notification to report an exceptional event involving an OIE-listed disease is 24 hours. In order to evaluate compliance with this requirement and review the timing of event notifications, the date of the start of the event, date of event confirmation and date of reporting were analysed for all the immediate notifications submitted from the Middle East Region for the period January 2018 to 6 August 2019, by type of disease (aquatic vs terrestrial). The results were then compared to the results for the rest of the world.

Table 1 shows that the average time for confirmation (i.e. from start of the first outbreak to confirmation of the event) was longer for terrestrial events in the Region in comparison with the same indicator in the rest of the world (21.5 days for the Middle East vs 11.8 for the rest of the world). However, this same indicator was shorter for aquatic events (34 days for the Middle East vs 46.4 for the rest of the world). It is important to highlight that this period (from the start of the event to confirmation) is influenced by many factors (national legislation, definition of the term ‘confirmation’, clinical presentation in the field, first occurrence of the disease, etc.). Therefore, this is only a descriptive indicator of the information provided by the countries and territories and does not include a detailed analysis of these various factors).

After confirmation of the event, immediate notifications were submitted earlier for terrestrial events in the Middle East than for terrestrial events in the rest of the world (8.9 vs 11.2 days on average) and considerably earlier in the case of aquatic events. The results for the aquatic reports should be treated with caution in view of the very small number of immediate notifications submitted. Indeed, during the period of analysis only one immediate notification was submitted for an aquatic disease from the Middle East, which is too small a sample to draw any meaningful conclusions.

Table 1: Average number of days between the start of the outbreak, event confirmation and report submission for immediate notifications submitted by countries and territories of the Middle East Region vs the rest of the world, by type of disease (aquatic vs terrestrial) during the period 1 January 2018 to 6 August 2019

	Terrestrial		Aquatic	
	Middle East (n=24)	Rest of world (n=488)	Middle East (n=1)	Rest of world (n=26)
Start to Confirmation	21.5	11.8	34	46.4
Confirmation to Submission	8.89	11.2	42	34.8
Start to Submission	30.4	22.9	76	81.2

The analysis reflects a better compliance in the Middle East with the requirement of submitting the immediate notifications after the confirmation of the event than in the rest of the world, although reporting times are still far from the official requirement of within 24 hours of event confirmation. Considerable efforts are needed globally to reduce the reporting delay for exceptional events and ensure the timely submission of information to the OIE. On the other hand, the average delay for confirmation of the event was quite long in the Middle East and this finding should be reviewed cautiously and evaluated internationally to ascertain the causal factors and, where appropriate, implement the necessary corrective actions.

2.2. Six-monthly reports

The OIE Codes do not set any requirement for the timing of the submission of six-monthly reports. Nevertheless, during training of national Focal Points for Animal Disease Notification to the OIE and through reminders to OIE Delegates, the OIE World Animal Health Information and Analysis Department recommends that these reports be submitted as soon as possible after the end of the relevant semester.

Overall, for the year 2018, the submission times for all the Middle East reports were very similar to those for the rest of the world. Specifically, the first semester aquatic six-monthly report was submitted an average of 24 days earlier by the Middle East than by the rest of the world. For the remainder of the reports (both terrestrial reports and the second semester aquatic report), there was no difference in the submission times compared with the rest of the world. As pointed out in the World Animal Health Report presented during the General Session of the OIE in May 2019, second semester reports (aquatic and terrestrial) were submitted with a much shorter delay than the first semester reports, most likely due to the additional efforts made to remind countries to submit their reports in preparation for the General Session. This suggests that countries and territories might also be able to submit their first semester report in a more timely fashion, and this behaviour should therefore be encouraged.

Table 2: Average time (in days) taken to submit aquatic and terrestrial six-monthly reports (SMR) for 2018 after the end of the reporting period: comparison between the Middle East Region and the rest of the world

SMR for 2018	Middle East Region	Rest of the world
Aquatic SMR 1	102	126
Aquatic SMR 2	76	73
Terrestrial SMR 1	134	131
Terrestrial SMR 2	75	74

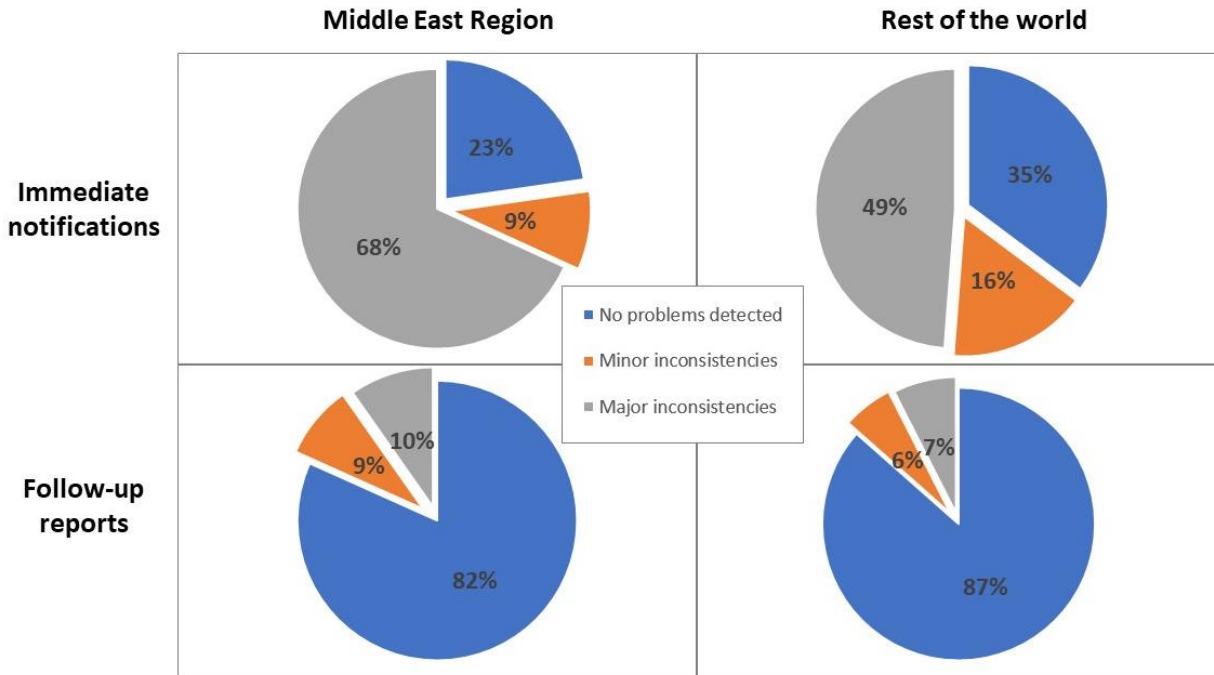
3. QUALITY OF REPORTING

3.1. Immediate notifications and follow-up reports

The quality of the exceptional reports (immediate notifications and their follow-up reports) submitted by countries and territories in the Middle East Region was also evaluated, taking into account the existence of any inconsistencies/problems in the reports submitted, the importance of these inconsistencies (classified as minor or major [i.e. requiring the country or territory to be contacted before the publication of the report]) and their number.

As shown in Figure 3, the number of inconsistencies and their importance (minor or major) differed considerably between immediate notifications and follow-up reports. For the follow-up reports, the quality was very similar between the Middle East Region and the rest of the world, with respectively 81% and 87% of the reports received presenting no inconsistencies. However, in the immediate notifications submitted from the Middle East Region, the proportion with inconsistencies was higher than in the rest of the world: only 23% of the submitted notifications were free from inconsistencies (vs 35% in the rest of the world). Furthermore, as clearly shown in Figure 3, the inconsistencies detected in the immediate notifications from the Middle East Region were more frequently major, requiring the country to be contacted and consequently delaying the validation of the immediate notification.

Figure 3: Analysis of inconsistencies found in immediate notifications and follow-up reports submitted from the Middle East Region and from the rest of the world



Overall, for follow-up reports from the Middle East, 75% of the reports with inconsistencies presented only one inconsistency and in only one field. However, in the immediate notifications it was more common to detect more than one inconsistency, and this may have been due to the greater complexity of the report (much more new information than in the follow-up reports). These factors (a higher frequency of reports with inconsistencies, a higher number of inconsistencies per report and a higher frequency of major inconsistencies) generally make immediate notifications more difficult to process and this means greater efforts are needed in order to validate them.

3.2. Six-monthly reports

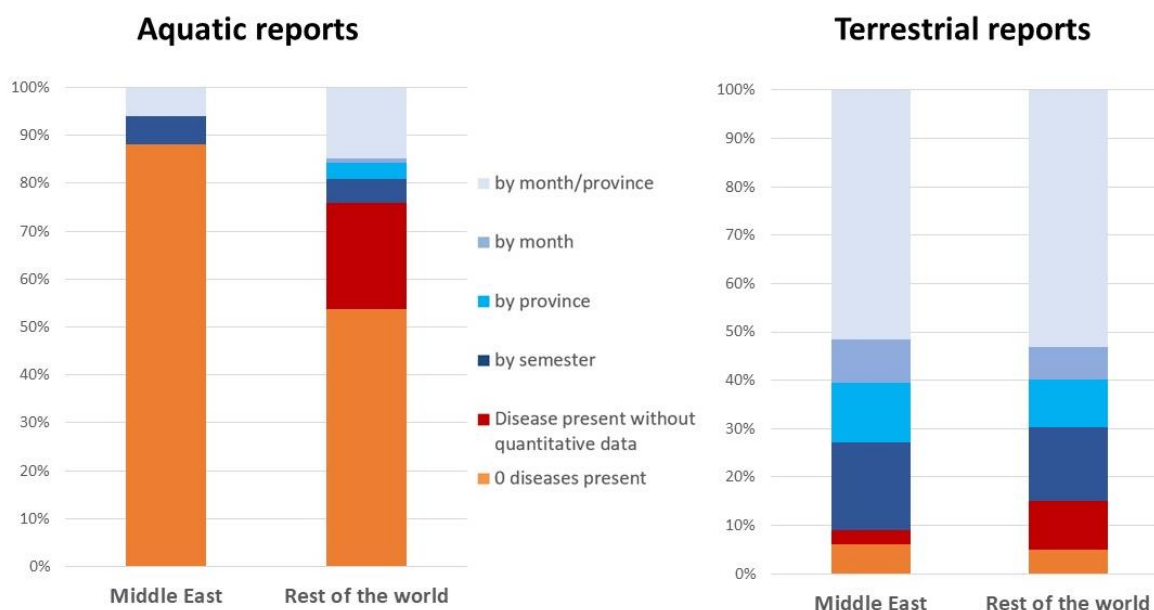
The analysis took into account two main indicators: firstly, the number of diseases with the occurrence code 'no information' per report and, secondly, the level of detail of any quantitative data provided for the diseases reported as 'present'. The greater the quantity and detail of the information provided, the higher the quality of the report.

Table 3: Percentage of diseases for which no information was provided per type of report (aquatic vs terrestrial) and type of animal (domestic vs wild) in the six-monthly reports submitted by countries and territories of the Middle East Region in 2018

	Domestic	Wild
Aquatic	18%	23%
Terrestrial	13%	30%

Terrestrial diseases in domestic animals were the type of disease with the highest compliance of reporting, with an average of 77% of these diseases per six-monthly report being reported with an occurrence code. However, for terrestrial diseases in wild animals, the percentage of underreporting was very high, as no information was provided for an average of 30% of the diseases per report. These results are very similar to the rest of the world, with the exception that, in the Middle East Region, the differences between the aquatic and the terrestrial reports were smaller. These results indicate greater efforts should be made to provide more complete information on the status of OIE-listed diseases in wild animal populations.

Figure 4: Level of detail provided for OIE-listed diseases in the six-monthly reports for 2018, by type of report (aquatic vs terrestrial) and by region (Middle East vs rest of the world)



The analysis of the level of detail of information provided in the aquatic reports from the Middle East was limited by the fact that most (almost 90%) of the aquatic diseases were reported as absent. When aquatic diseases were present, the reports from the Middle East provided quantitative information either by semester or by month and province (Figure 4). This behaviour differed markedly from that shown in the terrestrial reports, most of which provided the highest level of detail (by month and administrative division). The behaviour was similar to that shown in the reports from the rest of the world, although in the Middle East more quantitative data were provided for terrestrial diseases reported as present. This reflects well on the training provided and demonstrates good compliance with procedures by Focal Points for Disease Notification to the OIE, which should be further encouraged.

- The submission rates for the six-monthly reports for 2018 were lower in the Middle East Region than in the rest of the world, a difference that was particularly marked in the case of aquatic reports.
- The immediate notifications were submitted with longer average delays and with more frequent and, comparatively more serious inconsistencies in the Region, when compared to the rest of the world.
- The information on disease status provided in the six-monthly reports from the Middle East Region was generally good, especially for terrestrial diseases in domestic animals. However, greater efforts should be made to provide information on the status of OIE-listed diseases in wild animal populations.
- The quality and amount of quantitative information provided for the terrestrial animal diseases present was, on average, better in the Middle East than in the rest of the world. The majority (90%) of aquatic diseases were reported as absent in the Region, which hampers the evaluation of this indicator.

Countries and territories of the Middle Region are strongly encouraged to continue their efforts to submit timely, complete and accurate information in their reports, with special attention to the immediate notifications.

SELECTED ANIMAL DISEASES

The second part of the report provides a detailed analysis of some groups of animal diseases, including the situation in the Middle East Region (disease distribution and reports received), the control measures applied and diagnostic capacity, as reported to the OIE during the period 1 January 2018 to 6 August 2019.

a. Avian diseases

Disease situation and reporting

Three OIE-listed diseases of birds were selected for analysis in this section: infection with avian influenza viruses of both high and low pathogenicity (HPAI in poultry and LPAI), and infection with influenza A viruses of high pathogenicity in birds other than poultry, including wild birds (HPAI in wild birds).

These diseases were selected in view of the importance of avian production in the Middle East, especially due to the substantial growth of the poultry sector in the Region during the past two decades². The latest FAO³ statistics⁴ indicate that 6.4% of the chicken meat produced in the world originated from the Middle East, and the Middle East accounted for 4% of world egg production.

In comparison with the rest of the world, the selected avian diseases were reported present in a smaller proportion of countries and territories in the Middle East Region. Specifically, HPAI in poultry was

² Nassar, Farid & Stino, Farid. (2013). Poultry production in the Middle East and African States: situation, future and strategies.

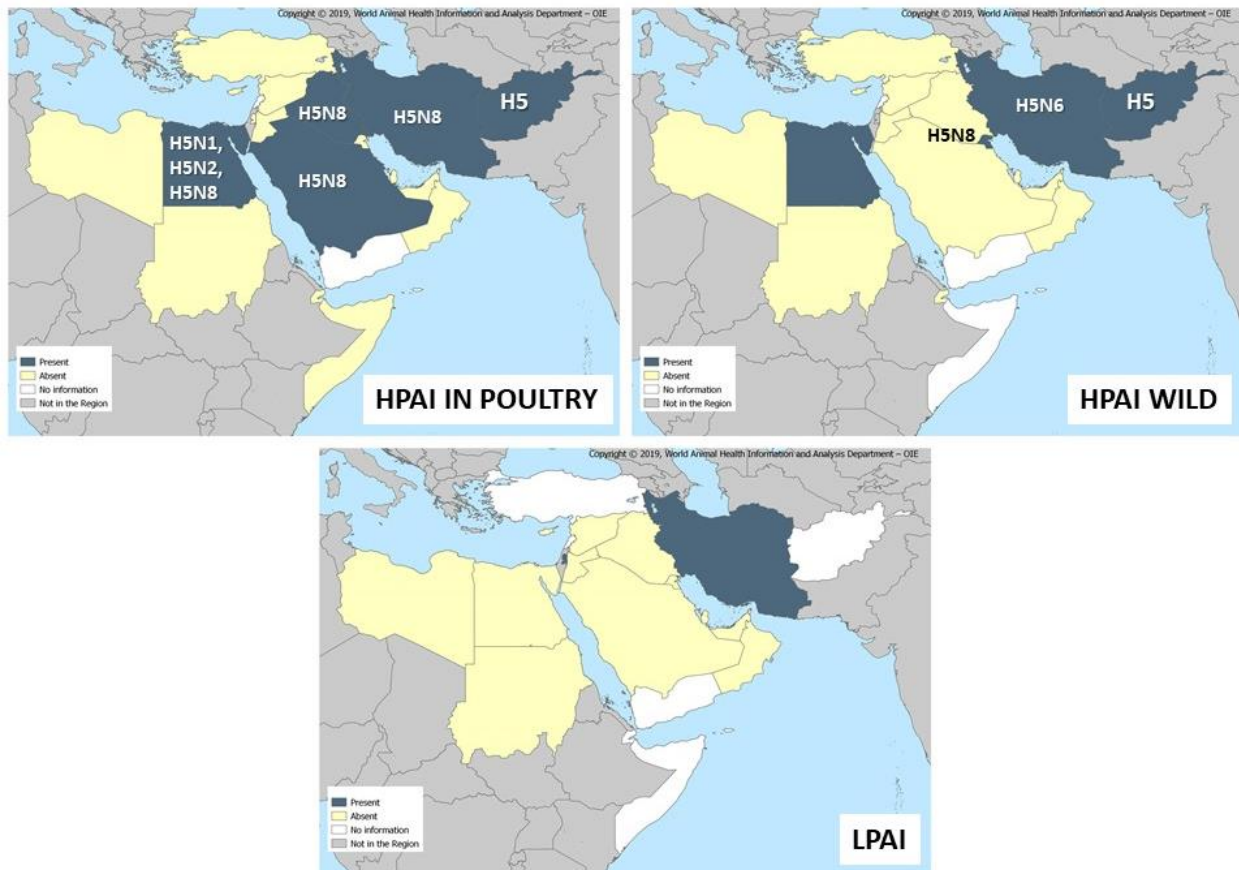
³ FAO: Food and Agriculture Organization of the United Nations

⁴ FAOSTAT - <http://www.fao.org/faostat/en>

reported present in 23% of countries and territories in the Region (5 out of 21), HPAI wild in 19%, and LPAI in only 9% (as of 6 August 2019).

During the period of analysis, 33% of the countries and territories in the Region (7 out of 21) reported the presence of at least one of the three selected diseases: 9% reported the concomitant presence of HPAI in poultry and wild birds (2 out of 21), and only one country reported the presence of all three selected diseases. Maps showing the reported distribution of the three selected diseases are presented in Figure 5.

Figure 5: Distribution of HPAI in poultry, HPAI in wild birds and LPAI in countries and territories in the Middle East Region during the period 1 January 2018 to 6 August 2019: information is displayed at country level



All the countries of the Region where HPAI in poultry was reported as present reported the presence and evolution of the disease through immediate notifications and follow-up reports. In particular, 8 immediate notifications were submitted by the Region during this period, 75% of these on the recurrence of the disease. The HPAI serotype most commonly reported in poultry in the Region during this period was H5N8 (4 countries and 5 immediate notifications), followed by H5N2 (one country, one immediate notification); one country reported H5N1; finally, one country only provided information on the haemagglutinin type (H5).

Similarly, for HPAI in wild birds, 75% of the affected countries reported through immediate notifications, while one country reported the disease through six-monthly reports. Three immediate notifications for this disease were submitted by three countries during this period, one for each serotype: Iran reported the presence of H5N2 as a new strain in the country, Kuwait reported the recurrence of H5N8 and Afghanistan reported the recurrence of H5 (neuraminidase not typed).

No immediate notifications were submitted for LPAI in the Region during the period of analysis, and no quantitative information was provided in the six-monthly reports by either of the two countries affected. In the case of HPAI in poultry, all the affected countries reported through immediate notifications and

follow-up reports, providing the highest level of detail; in the case of HPAI in wild birds, one third of the affected countries did not provide quantitative information, either through immediate notifications, or in their six-monthly reports.

Table 4: Status of selected avian diseases in the Middle East Region, and the format used by countries and territories to report each disease present (by immediate notifications or by providing quantitative information in six-monthly reports) (as of 6 August 2019)

	No. countries/territories reporting disease present				ABSENT	NO INFO
	Total	IN/FUR	Quant. info.	No quant. info.		
HPAI in poultry	5	5	5	0	14	2
*HPAI wild	4	3	3	1	13	4
LPAI	2	0	0	2	13	6

* HPAI in birds other than poultry, including wild birds
 IN/FUR: immediate notifications/follow-up reports

Preventive and control measures reported

Based on the information contained in six monthly reports, HPAI in poultry was the selected avian disease with the highest proportion of countries and territories in the Middle East Region reporting at least one control measure in place: 85% (18 out of 21 countries and territories). In all those countries and territories the disease is considered notifiable and some type of surveillance is applied in most of them (17 out of 18).

For the other two avian diseases (HPAI in wild birds and LPAI), 71% of countries reported at least one control measure, these diseases being notifiable in most of the countries reporting that at least one control measure is applied. The proportion of countries reporting any type of surveillance was slightly lower for HPAI in wild birds than for HPAI in poultry (80% in poultry vs 67% in non-poultry), but still much higher than the surveillance activities for LPAI (47% countries applying some type of surveillance).

Finally, very few countries reported routine vaccination for avian influenza viruses, specifically one country for HPAI in poultry and two countries for LPAI; vaccination was prohibited in a much higher numbers of countries.

Table 5: Number of countries and territories in the Middle East Region applying control measures for three selected avian diseases, as indicated in their six-monthly reports

	Reporting at least one control measure	Notifiable disease	Surveillance*	Routine vaccination (Vaccination prohibited)
HPAI in poultry	18	18	17	1 (13)
**HPAI wild	15	15	14	0 (6)
LPAI	15	14	10	2 (2)

*Surveillance: any type of surveillance was considered, including general surveillance, targeted surveillance, monitoring and screening. If the country/territory reported the application of at least one of these measures, it was considered to apply surveillance of some kind.

** HPAI in birds other than poultry, including wild birds

Diagnostic capacities of countries and territories in the Middle East Region

The diagnostic capacities of countries and territories in the Middle East Region were assessed for each of the selected avian diseases, based on their sanitary situation, using the laboratory and diagnostic test information submitted in the annual reports for 2018 (“National reference laboratory” and “Diagnostic tests” sections). The information provided in immediate notifications and follow-up reports on the diagnostic laboratories and tests used in connection with the exceptional events reported in 2018 and 2019 was also considered in the analysis (Table 6). Information on HPAI in poultry and HPAI in wild birds was grouped together. The countries were classified as ‘present’ or ‘not present’ (including countries where the disease was reported as absent or no information was provided), based on the reports submitted during the period of analysis.

Two thirds of the countries and territories in the Region affected by HPAI, as well as six countries with no presence of the disease, reported having diagnostic capacities for HPAI. Two other countries, which reported the presence of HPAI and LPAI, did not report having any diagnostic capacity. Interestingly, only one country in the Region reported the presence of a laboratory with diagnostic capacity for LPAI. Considering that the same diagnostic techniques can be used for the detection of both HPAI and LPAI, this result could be interpreted as an inconsistency in the information reported by countries.

Although the diagnostic capacity reported in the annual reports is quite sufficient for HPAI, there were nevertheless numerous laboratories (and 2 countries) reported in the immediate notifications/follow-up reports that had not been reported before in the annual reports. Countries are encouraged to make sure that the information on diagnostic capacities they indicate in their annual reports is as up to date and complete as possible. Providing accurate information on diagnostic capacities enables an evaluation to be made of the Region’s performance in terms of proper surveillance and early detection of diseases.

The new OIE-WAHIS will incorporate some improvements in the section on diagnostics reporting, which will facilitate not only the process of reporting information, but also the visualisation of data (e.g. searching for available laboratories in the Region performing test X for disease A). These new tools will support countries in their decision-making and improve the transparency of the available data.

Table 6: Diagnostic capacity in the Middle East Region for the selected avian diseases as reported in the annual report (AR), in comparison with the information submitted in the immediate notifications and follow up reports (IN/FUR): figures in parentheses indicate the number of countries/territories with diagnostic capacity or the number of laboratories with diagnostic capacity reported in the IN/FUR but not in the relevant AR

	Countries by sanitary situation		No. of countries and territories in the Region with diagnostic capacity		No. of laboratories in the Region with diagnostic capacity	
			AR	IN/FUR (not in AR)	AR	IN/FUR (not in AR)
HPAI	Present	6	4	6 (2)	5	8 (5)
	Not present	15	6	NA	9	NA
LPAI	Present	2	0	0 (NA)	0	0 (NA)
	Not present	19	1	NA	1	NA

NA: Not applicable. In the countries where the disease is not present, no IN/FUR are submitted

- The distribution of the three selected avian diseases is limited to a very few countries in the Middle East Region, HPAI in poultry being the disease with the widest distribution.
- The quality and accuracy of reporting was very high for HPAI in poultry, good for HPAI in wild birds; and unsatisfactory for LPAI.
- Good diagnostic capacity was reported by countries and territories affected by HPAI in the Region in their annual report. However, some additional laboratories and countries with diagnostic capacity were identified in the immediate notifications, revealing the need for countries to update and complete the information in their annual report.

The OIE highlights the good performance of the Region for the reporting of HPAI in poultry in terms of disease evolution, control measures and diagnostics. Members are encouraged to follow the same procedure and good reporting behaviour for the other avian diseases, including the updating of diagnostic information in the annual report.

In the spirit of international solidarity, one of pillars of the OIE, countries and territories of the Middle East Region with optimal diagnostic capacities are encouraged to provide assistance to other countries, both within and beyond the Region, having a lower level of resources in this respect.

b. Equine diseases

Equids play an important role in the Middle East, not only as a source of draught power, but importantly also for competitive and recreational riding, creating an important socio-economic contribution. According to the latest available FAO data (2017)⁵, there are more than 8 million equids in the Middle East Region, which represent 7% of the worldwide population for these species. Specifically, donkeys are quite important in the Region and account for 14% of the total ass population worldwide.

Of the 11 OIE-listed equine diseases⁶, only three were reported as present during the period 1 January 2018 to 6 August 2019 in at least one country of the Middle East. Therefore, this section will focus on the diseases reported as present in the Region, namely, infection with equid herpesvirus-1 (EHV-1), infection with *Burkholderia mallei* (glanders) and equine piroplasmiasis.

Disease distribution and reporting

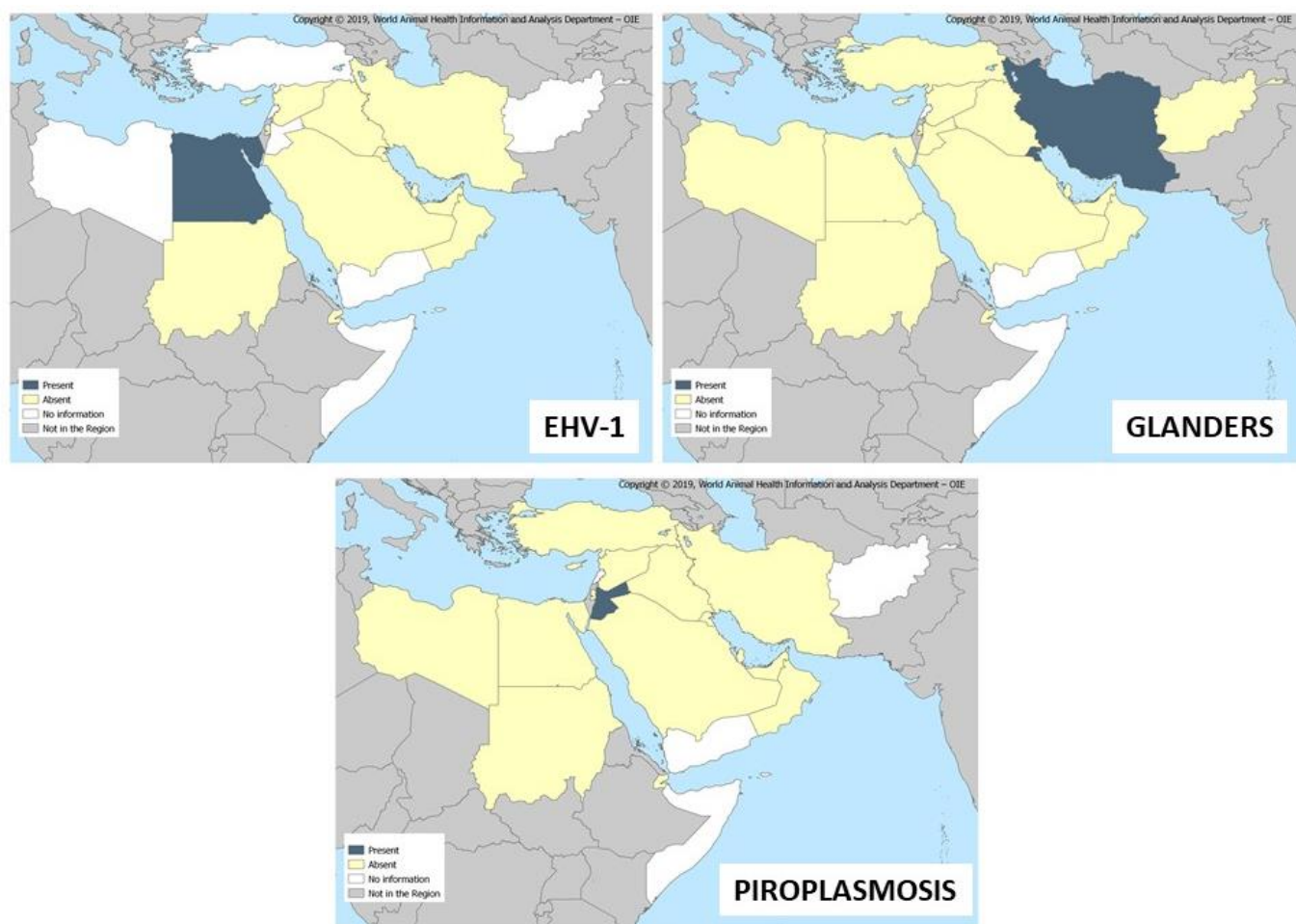
As shown in Figure 6 and Table 7, the number of countries or territories reporting any of the three selected equine diseases as present is very small, with a maximum of 2 (out of 21) countries and territories in the Region reporting glanders as present.

Countries and territories of the Middle East are encouraged to review this information, assess whether the data reported accurately reflect the reality of the Region and, if needed, take appropriate measures in future reports.

⁵ FAOSTAT - <http://www.fao.org/faostat/en>

⁶ Contagious equine metritis, dourine, equine encephalomyelitis (western), equine infectious anaemia, equine influenza, equine piroplasmiasis, infection with African horse sickness virus, infection with equid herpesvirus-1 (EHV-1), infection with equine arteritis virus, infection with *Burkholderia mallei* (glanders), Venezuelan equine encephalomyelitis.

Figure 6: Distribution of selected equine diseases in countries and territories in the Middle East Region during the period 1 January 2018 to 6 August 2019: information is displayed at country level



During this period, only one immediate notification was submitted for any of these diseases in the Region and related to the recurrence of glanders in Kuwait in July 2019. Of the three selected diseases, glanders was the one with the best quality of reporting in the Region, as both countries affected provided quantitative information and only three countries provided no information on the disease situation. Conversely, for the other two selected diseases, the countries affected did not provide any quantitative data, and seven countries did not provide any information on the disease situation.

Table 7: Status of equine diseases in the Middle East Region, and the format used by countries and territories to report each disease present (by IN/FUR or by providing quantitative information in six-monthly reports) (as of 6 August 2019)

	PRESENT				ABSENT	NO INFO
	Total present	IN/FUR	Quant. info	No quant. info		
EHV-1	1	0	0	1	13	7
GLANDERS	2	1	2	0	16	3
EQUINE PIROPLASMOSIS	1	0	0	1	16	4

Preventive and control measures reported

Of the three selected diseases, glanders was the one with the highest level of control measures reported. Seventeen countries or territories (80%) reported having at least one control measure for glanders, which was notifiable in all of them. In addition, some type of surveillance for glanders was applied in 60% of the countries and territories in the Region, whereas only 38% reported surveillance for EHV-1. This result indicates that compliance with reporting requirements in the Region is higher for glanders than for the other equine diseases.

Table 8: Number of countries and territories in the Middle East Region applying control measures for the three selected equine diseases, as indicated in their six-monthly reports

	Reporting at least one control measure	Notifiable disease	Surveillance*	Routine vaccination (Vaccination prohibited)
EHV-1	13	13	8	2 (0)
GLANDERS	17	17	13	0 (0)
EQUINE PIROPLASMOSIS	16	16	9	0 (0)

*Surveillance: any type of surveillance was considered, including general surveillance, targeted surveillance, monitoring and screening. If the country/territory reported the application of at least one of these measures, it was considered to have applied surveillance of some kind.

Diagnostic capacities of countries and territories in the Middle East Region

A similar situation is observed for diagnostic tests. Glanders was the selected equine disease with the highest diagnostic capacity in the Region, with six countries able to perform glanders diagnosis. Specifically, one of the two affected countries indicated having diagnostic capacity for glanders in its annual report, and this information matched the laboratory information reported through immediate notifications, which is a good sign of reporting quality. However, the diagnostic capacities reported in the Middle East for the other two equine diseases were scarce. While the country that reported EHV as present indicated having the relevant diagnostic capacity, the country that reported the presence of piroplasmosis did not indicate having the relevant diagnostic capacity in its annual report. Taken together, these data indicate that the diagnostic capacities reported in the Region are not very high for the selected equine diseases. This is surprising, considering the importance of the equine population for the Region, not only equids that provide a source of draught power, but importantly, the race horses and pure breed animals, which require maximum levels of animal health controls. Therefore, countries are encouraged to review this section in their next annual report and make best use of the new features due to be integrated in OIE-WAHIS to facilitate and enhance the reporting of laboratory capacities.

Table 9: Diagnostic capacity in the Middle East Region for the three selected equine diseases as reported in the annual report (AR), in comparison with the information submitted in the immediate notifications and follow up reports (IN/FUR): figures in parentheses indicate the number of countries/territories with diagnostic capacity or the number of laboratories with diagnostic capacity reported in the IN/FUR but not in the relevant AR

	Countries by sanitary situation		No. of countries and territories in the Region with diagnostic capacity		No. of laboratories in the Region with diagnostic capacity	
			AR	IN/FUR (not in AR)	AR	IN/FUR (not in AR)
EHV-1	Present	1	1	0 (0)	1	0 (0)
	Not present	20	1	NA	1	NA
GLANDERS	Present	2	1	1 (0)	1	1 (0)
	Not present	19	5	NA	5	NA
EQUINE PIROPLASMOSIS	Present	1	0	0 (0)	0	0 (0)
	Not present	20	3	NA	3	NA

NA: Not applicable. In the countries where the disease is not present, no IN/FUR are submitted

- During the period of analysis, only three OIE-listed equine diseases were reported to have occurred in the Middle East Region and only one immediate notification for an equine disease was submitted in the Region.
- A good level of reporting was observed for the control measures applied in the Region for the selected equine diseases, glanders being the disease with the highest proportion of countries applying surveillance.
- The diagnostic capacity reported for the selected equine diseases in the Region was quite low, with the exception of glanders.

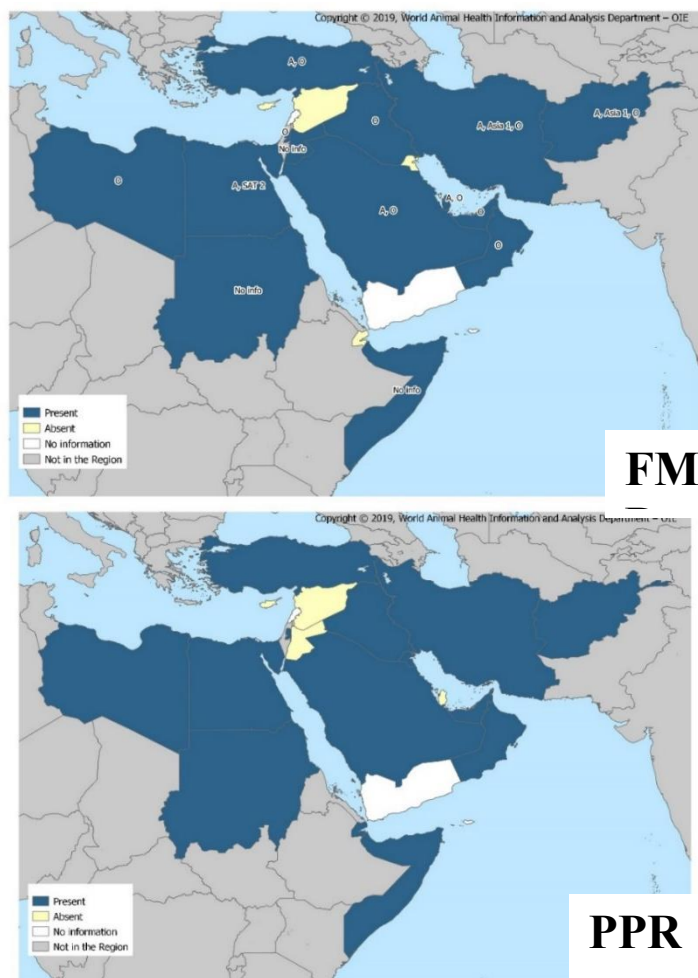
The OIE highlights the paucity of data available for OIE-listed equine diseases in the Region and therefore encourages Members to review their reporting of these diseases in future six-monthly reports.

c. Ruminant diseases

Disease distribution and reporting

Another group of diseases selected for this analysis included diseases that affect ruminant hosts such as bovine, ovine and caprine species, among others. Two diseases were chosen in order to compare the reporting performance of countries and territories in the Middle East Region. Firstly, FMD was chosen as a transboundary animal disease with a high impact on international trade, and one that is widespread in most of the Middle East Region (Figure 8). Secondly, peste des petits ruminants (PPR) was selected as an example of a disease that is widespread in the Region and one for which a global eradication programme is in progress (Figure 7).

Figure 7: Distribution of FMD and PPR in countries and territories in the Middle East Region, during the period 1 January 2018 to 6 August 2019: information is displayed at country level



FMD affected 66% (14⁷/21) of the countries and territories of the Middle East during the period of analysis. In most of these countries and territories, the disease is reported to be present and stable, and detailed quantitative information is provided by 78% of the countries reporting the disease present, through the six-monthly reports. Only one country reported the disease present without providing quantitative information (Table 10).

Two countries or territories submitted immediate notifications for FMD during this period (3 immediate notifications in total). In June 2018, Palestine reported the recurrence of the disease in the West Bank. No information was provided on the serotype and the event was declared resolved in October 2018; in April 2019, a new event was reported in the same area, and serotype O was identified. The event was declared resolved in June 2019. In April 2019, Libya reported the recurrence of the disease in Misratah and Tarabulus (serotype O), and the event was resolved in June 2019

⁷ Afghanistan, Egypt, Iran, Iraq, Jordan, Libya, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Turkey, and United Arab Emirates.

During the period of analysis, PPR was reported present in 14⁸ countries and territories in the Middle East Region. Only one immediate notification was submitted in the Region. This was for the recurrence of the disease in Libya. The country reported the recurrence of the disease in January 2019, in the administrative division of Benghazi, and the event was declared resolved in May of the same year. Most of the affected countries and territories (86%) reported quantitative information through their six-monthly reports. However, despite the existence of a global eradication programme, two countries still reported the disease as present without providing any quantitative information.

Table 10: Status of FMD and PPR in the Middle East Region and the format used by countries and territories to report each disease present (by immediate notifications/follow-up reports [IN/FUR] or by providing quantitative information in the six-monthly reports [SMR])

	PRESENT				ABSENT	NO INFO
	Total present	IN/FUR	Quant. info. SMR	No quant. info.		
FMD	14	2	11	1	5	2
PPR	14	1	11	2	5	2

Preventive and control measures reported

The analysis of reported preventive and control measures revealed a regionally high level of reporting for this group of diseases. Specifically, FMD is reported to be notifiable in most of the Region (in 90% of countries and territories), with surveillance being applied in most countries and territories (81%). This reveals that, despite being present and stable in many countries of the Region, FMD is still considered a high priority, and this is reflected in the reports submitted. Vaccination is applied as a preventive and control measure in most of the Region (71% of countries and territories), only one country (Cyprus) reporting that vaccination is prohibited. Therefore, the appropriate matching of vaccines with the circulating strains is crucially important for the control of the disease in the Middle East Region.

In view of the existence of a global PPR eradication programme, it is important to note that almost all the countries and territories in the Region reported that the disease is notifiable, and most of them reported having surveillance in place. Vaccination is routinely applied in most of the affected countries and is prohibited in only four of them (it is worth bearing in mind that the prohibition of vaccination in a country is one of the first steps to attain the official status of freedom).

Only one country in the Region has an official disease status for both of the selected diseases and it reports that complete preventive and control measures are in place, in accordance with the requirement specified in the *Terrestrial Animal Health Code*.

Table 11: Number of countries and territories in the Middle East Region applying control measures for FMD and PPR, as indicated in their six-monthly reports

	Reporting at least one control measure	Notifiable disease	Surveillance*	Routine vaccination (Vaccination prohibited)
FMD	19	19	17	15 (1)
PPR	19	19	18	12 (4)

*Surveillance: any type of surveillance was considered, including general surveillance, targeted surveillance, monitoring and screening. If the country/territory reported the application of at least one of these measures, it was considered to have applied surveillance of some kind.

⁸ Afghanistan, Djibouti, Egypt, Iran, Iraq, Kuwait, Libya, Oman, Palestine, Saudi Arabia, Somalia, Sudan, Turkey, and United Arab Emirates.

Diagnostic capacities of countries and territories in the Middle East Region

As shown in Table 12, diagnostic capacity for FMD in the Region is generally not very high but is nevertheless comparable to the diagnostic capacity for other transboundary animal diseases analysed in this report, such as HPAI. Less than half of the countries and territories in the Region reported diagnostic capacities for FMD and this clearly needs to be improved, considering the current and widespread presence of the disease. It is interesting to note that the presence of laboratory capacities was indicated by only 64% of the countries reporting the disease present, and by only 40% of those declaring the disease absent. This highlights a possible gap in the capacity of countries to quickly confirm the presence of the disease or an underreporting of national laboratory capacities in the annual report.

An even lower number of countries reported having capacities for PPR diagnosis. Only 38% of countries in the Region reported having any diagnostic capabilities for the disease, and only 12 laboratories were reported to have the capacity to perform diagnosis. Laboratory capacities were declared by only 50% of the countries reporting the disease present and by none of the countries declaring the disease absent. Here, too, the situation is quite alarming, suggesting either the likelihood of disease underreporting or that the information provided by countries is of poor quality.

In view of the findings reported in this section, countries and territories in the Region are encouraged to pay particular attention to completing the relevant section in their annual reports, in order to provide a more reliable picture of the diagnostic capacity in the Region. This is particularly true for PPR as this is an essential component of the eradication programme.

Table 12: Diagnostic capacity in the Middle East Region for the selected ruminant diseases, as indicated in the annual report (AR) in comparison with the information submitted in immediate notifications and follow-up reports (IN/FUR): figures in parentheses indicate the number of countries/territories with diagnostic capacity or the number of laboratories with diagnostic capacity reported in the IN/FUR but not in the relevant AR

	Countries by sanitary situation		No. of countries and territories in the Region with diagnostic capacity		No. of laboratories in the Region with diagnostic capacity	
			AR	IN/FUR (not in AR)	AR	IN/FUR (not in AR)
FMD	Present	14	8	1 (1)	14	1 (1)
	Not present	5	2	NA	2	NA
PPR	Present	14	7	1 (1)	11	1 (1)
	Not present	5	0	NA	0	NA

NA: Not applicable. In the countries where the disease is not present, no IN/FUR are submitted

- FMD is widely distributed in the Region, with four circulating serotypes (O, A, Asia1, and SAT2). Very good quality information was available for FMD distribution, quantitative data and control measures applied. However, the diagnostic capacity reported for FMD in the Region was not very high.
- PPR is also widespread in the Middle East Region, and very few countries report the disease as absent. Unfortunately, the quantitative information for PPR distribution and diagnostic capabilities does not appear to be accurate. Most of the countries reported having some surveillance in place for the disease and an ongoing vaccination programme.

In view of the above findings, countries and territories in the Region are encouraged to continue their efforts on reporting the FMD situation and the control measures applied, and to improve the reporting of PPR-related information in order to support the global eradication programme.

d. Rabies

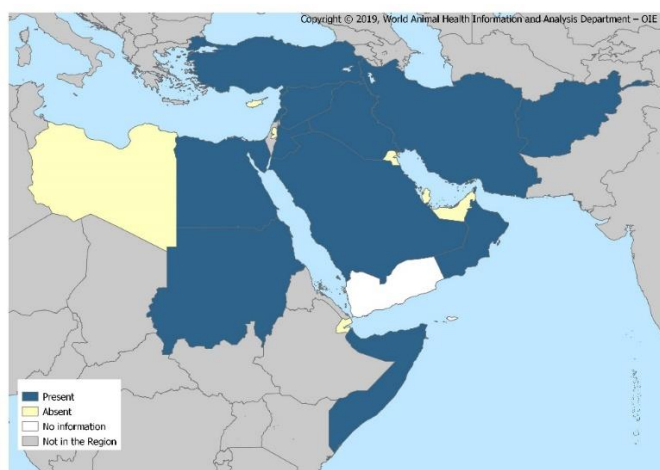
Disease distribution and reporting in the Middle East Region

The main reason driving the selection of rabies for this report was to evaluate the current situation in the Region in the framework of “Zero by 30: The Global Strategic Plan to Prevent Human Deaths from Dog-mediated Rabies by 2030”⁹, developed jointly by WHO, OIE, FAO and the Global Alliance for Rabies Control (GARC), and contribute to the elimination of dog-mediated human rabies in the region by 2030. The Global Strategic Plan focuses on the feasibility of ending human deaths from dog-mediated rabies, through the availability of relevant knowledge, technologies and vaccines, and the benefits of using barrier or ring vaccination to protect dog and human populations, as long as such vaccination extends a sufficient distance from infected cases or areas and provides sufficient vaccination coverage (at least 70%).

For this reason, an update on the status of the disease in the Middle East Region, the reporting behaviour of the countries and territories, the preventive and control measures in place and the Region’s diagnostic capacity is considered of pivotal importance to be in a position to understand the level of compliance with the Global Strategic Plan.

During the period of analysis (1 January 2018 to 6 August 2019) rabies was reported as present by 57% of countries and territories in the Region (12¹⁰/21). Most of these countries reported the disease present only in domestic animals (7/12), four countries reported the disease present in both domestic animals and wildlife and one country reported the disease present only in wildlife. Rabies in dogs was reported by seven countries. During this period, only Lebanon reported the presence of the disease through an immediate notification. The event in Lebanon started in February 2018 in Ash Shamal administrative division. One outbreak has been reported through WAHIS with 1 case reported (in a dog). As of 6 August 2019, the event is still ongoing. The current distribution of rabies in the Middle East Region is shown in Figure 8.

Figure 8: Distribution of rabies in countries and territories in the Middle East Region during the period 1 January 2018 to 6 August 2019: information is displayed at country level



As already mentioned, rabies was reported through an immediate notification by only one country, while all the other 11 countries and territories that reported the disease present did so through their six-monthly reports, indicating that they considered the disease situation to be stable.

⁹ http://www.oie.int/fileadmin/Home/eng/Media_Center/docs/Zero_by_30_FINAL_online_version.pdf

¹⁰ Afghanistan, Egypt, Iran, Iraq, Jordan, Lebanon, Oman, Saudi Arabia, Somalia, Sudan, Syria, and Turkey.

Regarding the accuracy of the information provided, the level of detail reported by countries and territories was generally satisfactory, with 83% of them reporting complete quantitative details. Only two countries reporting the disease present did not provide quantitative data, and only one country in the Region did not submit any information about the status of the disease (no report submitted). Most countries reported quantitative information using the highest level of spatial accuracy (by administrative division) (Table 13).

Table 13: Status of rabies in the Middle East Region and the format used by countries and territories to report the disease present (by immediate notification/follow-up report [IN/FUR] or by providing quantitative information in the six-monthly reports [SMR])

	PRESENT				ABSENT	NO INFO
	Total present	IN/FUR	Quant. info. SMR	No quant. info.		
Rabies	12	1	9	2	8	1

Preventive and control measures reported

Based on the information reported in their six-monthly reports, around 90% of countries and territories in the Middle East Region apply at least one control measure for rabies. The disease is reported as being notifiable by 86% of countries and territories.

The level of surveillance reported was lower, with only 76% of countries and territories reporting disease surveillance (general surveillance, targeted surveillance, monitoring or screening). Finally, a lower proportion of countries (62%) reported routine vaccination for rabies prevention and control. This result is quite surprising, in view of the spread of the disease and the ongoing eradication project. With regard to the preventive and control measures applied in the framework of the eradication strategy, all seven of the countries reporting the presence of the disease in dogs declared applying official vaccination. This information can be an index of good compliance of countries with the Global Strategic Plan, but unfortunately in the current WAHIS no information is available on the vaccination coverage of the susceptible population (which must reach 70% in order to be effective in stopping the dog–human cycle). It is important to note that countries and territories will have the possibility to report this type of data in the new OIE-WAHIS.

Table 14: Number of countries and territories in the Middle East Region applying control measures for rabies, as indicated in their six-monthly reports

	Reporting at least one control measure	Notifiable disease	Surveillance*	Routine vaccination (Vaccination prohibited)
Rabies	19	18	16	13 (0)

*Surveillance: any type of surveillance was considered, including general surveillance, targeted surveillance, monitoring and screening. If the country/territory reported the application of at least one of these measures, it was considered to have applied surveillance of some kind.

Diagnostic capacities of countries and territories in the Middle East Region

The low level of rabies surveillance, as highlighted in the previous section, is also confirmed by the information provided through the annual reports, immediate notifications and follow-up reports. Based on these reports, only 52% of the countries that submitted information for 2017 and 2018 reported having some diagnostic capacity for rabies, with a total of 18 laboratories reported for the whole Region (Table 15). In particular, only 50% of the countries reporting the disease present declared diagnostic capabilities for rabies, and most of the countries (80%) reporting the disease absent have apparently no national diagnostic capacities.

Table 15: Diagnostic capacity in the Middle East Region for rabies, as reported in the annual report (AR) in comparison with the information submitted in the immediate notifications and follow-up reports (IN/FUR): figures in parentheses indicate the number of countries/territories with diagnostic capacity or the number of laboratories with diagnostic capacity reported in the IN/FUR but not in the relevant AR

	Countries by sanitary situation		No. of countries and territories in the Region with diagnostic capacity		No. of laboratories in the Region with diagnostic capacity	
			AR	IN/FUR (not in AR)	AR	IN/FUR (not in AR)
RABIES	Present	12	4	2 (2)	6	2 (2)
	Not present	8	2	NA	4	NA

NA: Not applicable. In the countries where the disease is not present, no IN/FUR are submitted

- Rabies continues to be one of the most widespread OIE-listed diseases in the Middle East Region. Only one country reported the presence of the disease through an immediate notification, confirming that the disease is stable in the Region.
- The level and accuracy of reporting and the details provided are very satisfactory. However, there is still room for improvement regarding the level of implementation and reporting of preventive and control measures, specifically surveillance and official vaccination.
- Limited diagnostic capacities for rabies were reported in the Region, with only around 50% of countries and territories reporting the presence of national laboratories with diagnostic capacities.

Based on these findings, the OIE highlights the good level of reporting on the rabies situation in the Region and the good quality of the information provided, but at the same time recommends that its Members strengthen their engagement in “Zero by 30: The Global Strategic Plan to Prevent Human Deaths from Dog-Transmitted Rabies by 2030”, in particular by improving rabies surveillance capacities and by improving vaccination coverage to reduce the spread of the disease.

Recommendation

Public–Private Partnerships (PPPs) for Efficient Sustainable Animal Health Systems and Veterinary Services in Middle East Member Countries

CONSIDERING THAT:

1. The Veterinary Authorities (commonly referred as Official Veterinary Services) provide the fundamental management system for animal health and welfare and veterinary public health in OIE Member Countries;
2. The World Organisation for Animal Health (OIE) has a proven record of supporting the strengthening of Veterinary Services and, since the establishment of its flagship programme, the OIE PVS Pathway, it has continued to affirm that, for the Veterinary Services to fulfil their mission, they require sustainable investment;
3. The PVS Pathway missions conducted over the past decade have shown that Veterinary Services are chronically under-resourced in many countries, leading to sub-optimal organisation and staffing of Veterinary Services, thereby jeopardising animal health and welfare nationally, regionally and globally, with impact on public health and the economy, among others;
4. The OIE has long recognised the important role of the private sector in the delivery of high quality and efficient services in the veterinary domain; and PPPs are consequently also recognised as important means of optimising animal health systems and Veterinary Services (VS) worldwide;
5. It is also widely recognised that strengthening partnership with the private sector is essential to achieve the Sustainable Development Goals (especially SDG n°17) by 2030 and this is also fully aligned with recent calls from the United Nations Secretary-General to engage business leaders in the challenges of financing the SDGs;
6. The Middle East region faces several challenges in building efficient and sustainable animal health systems and Veterinary Services;
7. Several successfully implemented and sustainable PPPs applied to the veterinary domain have been reported; but the full potential of such mechanism has yet to be exploited in many countries of the Middle East region; and
8. OIE Member Countries are interested in collaboration between the public and private sectors, as demonstrated by the adoption of Resolution no. 39 related to Public-Private Partnerships by the OIE Member Countries at the 85th General Session in May 2017.

THE REGIONAL COMMISSION FOR THE MIDDLE EAST

RECOMMENDS THAT:

THE GOVERNMENTS OF MEMBER COUNTRIES:

1. Facilitate the establishment of legal and administrative frameworks allowing Veterinary Services to develop effective, efficient and sustainable PPPs as a mechanism to address challenges in animal health and welfare, therefore contributing to the attainment of the SDGs by 2030;
2. Provide substantial efforts and investments in facilitating appropriate high-quality training and support the establishment and strengthening of effective Veterinary Statutory Bodies;

3. Consider developing a code of ethics to avoid conflicts of interest, and thus, helping Veterinary Services in establishing partnerships based on honesty, integrity and transparency;

THAT THE VETERINARY AUTHORITIES OF THE MEMBER COUNTRIES:

1. Create strong legislation and enforcement mechanisms for proper delegation of authority under PPPs enabling an environment that provides guarantees and commitments for the public sector to support the private sector in the long term while ensuring the ultimate responsibility of the services remain within their legal mandate;
2. Establish active dialogue, and preferably through a national and/or sectoral level PPP forum, to initiate or maintain permanent communications between the public sector and animal sectors' private stakeholders, to better identify the needs and potential solutions;
3. Support the evaluation, initiation, development and maintenance of successful PPPs in the veterinary domain, based on the guidelines for PPPs developed by the OIE in 2019;
4. Facilitate the establishment of targeted PPPs, as a means to achieve some of their key animal health and welfare priorities, in both terrestrial and aquatic animal health sectors, for the effective delivery of Veterinary Services to end users;
5. Consider design and implementation of collaborative and transformative PPPs in addition to the commonly applied sanitary mandate contracts (or transactional PPPs) by active engagement with producers' associations and national/international private and non-profit organisations;

AND THAT THE OIE:

1. Lead practical training programmes for its Member Countries for the development and implementation of sustainable PPPs, through the use of the **OIE PPP: Guidelines for the Public-Private Partnerships in the Veterinary Domain** (https://www.oie.int/publicprivatepartnerships/ppp/en/Handbook_en.html) as well as update these Guidelines, as needs be, according to the experience of OIE Member Countries in the implementation of sustainable PPPs;
2. Support, together with the Veterinary Authorities, partnerships between the public and private sector to use and improve, existing technologies as well as develop and implement new ones;
3. Continue developing advocacy material to help Delegates, sensitise decision makers to establish active dialogue on the value of sustainable Veterinary Services and the potential benefits of collaborating with the private sector to improve the quality and sustainability of their activities; and
4. Continue to provide PVS Pathway-related activities to strengthen the capacity of its Member Countries including in relation to PPPs.