bulletin

No. 2012 – 2

Health of aquatic animals

Organisation Mondiale de la Santé Animale • World Organisation for Animal Health • Organización Mundial de Sanidad Animal

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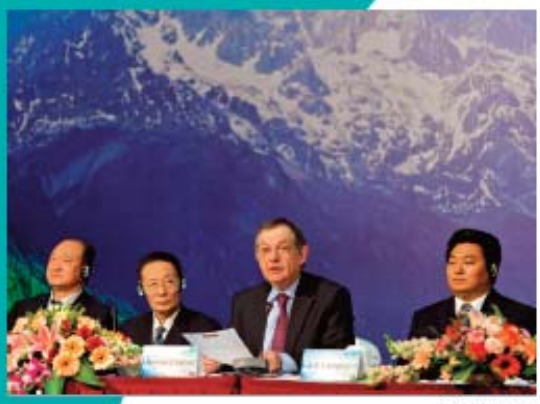

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contents

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Prevention and control of aquatic animal diseases: what is the OIE doing?

The production of food-producing animals in an aquatic environment is a rapidly expanding industry worldwide. In fact, production volumes are set to exceed those caught or harvested in the natural environment.

The aquatic animals produced in aquaculture consist of fish, molluscs, crustaceans and amphibians. The production techniques used are becoming increasingly sophisticated. Genetic selection plays an important part in increasing the productivity of aquaculture operations.

As a result, trade in breeding stock and genetic material has become globalised at the same time as exports of aquaculture products for human consumption. This in turn has promoted the globalisation of pathogens that affect aquatic animals. Some sectors, such as farmed shrimp and salmon, have suffered heavy losses as a result of imported diseases, and in some cases the epizootics have had disastrous economic and social consequences.

The production of food-producing animals in an aquatic environment is a rapidly expanding industry worldwide

Analysts estimate that, in the aquaculture sector, average production losses related to diseases currently exceed 25% worldwide. This could be due to the fact that these aquaculture sectors are quite a recent development. As a result, there is a significant time lag between the emergence of these sectors and the introduction of international and national health standards designed to prevent and control aquatic animal diseases.

There has also been a delay between solutions being proposed (based on the results of scientific research) and tools being made available to fight these diseases, which may often be accentuated by the effects of climate change (e.g. a rise in water temperature) or pollution (acidification of water due to CO_2).

The OIE's response is based on lines of action designed to deal with these worrying changes, in a world where the production of animal protein is crucial, especially when it can help to avoid the unsustainable exploitation of natural resources and the consequent threat to biodiversity.

The first action was to draw up a list of diseases of fish, molluscs, crustaceans and amphibians of importance for aquaculture production and for the sanitary safety of international trade in genetic material and aquaculture products for human and animal consumption.

For each listed disease, the OIE has prepared standards on surveillance, detection and risk analysis, to be proposed for adoption by its Members. These standards are prepared by an OIE Specialist Commission elected by Member Countries and are published in the OIE *Aquatic Animal Health Code*. To accompany these standards, the OIE also lists standardised laboratory techniques for identifying and characterising the pathogens responsible for the listed diseases. These standards are published in the OIE *Manual of Diagnostic Tests for Aquatic Animals*.

These two sets of standards are updated annually by a vote of the Member Countries. They are used by Member Countries to develop national measures for disease prevention, surveillance and control, as well as to protect their territory from unwanted introductions, while avoiding the use of unjustified sanitary measures. These standards are recognised as the reference standards by the World Trade Organization (WTO).

Another line of action is to support the public and private health systems responsible for managing the aquatic animal health situation in each Member Country. These include the public and private components of Veterinary Services as well as any other competent authority that the government has tasked with this mission. The OIE has prepared, and submitted

for adoption by its Member Countries, standards on the quality of Veterinary Services and any other competent national authority, and on the evaluation of their effectiveness. Based on these standards, a tool to evaluate these services' compliance with standards of quality has been developed. The OIE offers its Member Countries, on a strictly voluntary basis, an evaluation conducted by independent experts trained and certified by the OIE (i.e. a PVS Evaluation). The experts' report is the property of the country concerned, and can be used at a national level but may also be used at an international level to seek external funding where necessary in order to comply with the relevant standards.

The PVS Pathway also gives the country concerned the opportunity, after the initial PVS Evaluation, to ask the OIE to conduct a detailed analysis of the investments needed to achieve compliance with standards (i.e. a Gap Analysis mission) or to provide support for modernising its veterinary legislation. Over 110 countries have already made use of this OIE procedure, but so far only a small number of countries have applied for the specific procedure developed by the OIE for national systems applicable to aquatic animals.

The OIE has also asked the national Delegate of each of its Member Countries to nominate a National Focal Point for aquatic animal diseases, to be responsible, regardless of whether he or she comes under the same Ministry as the Delegate, for helping the Delegate to participate in the procedure for adopting or revising OIE standards on health and welfare of aquatic animals and to fulfil the country's obligations as an OIE Member (e.g. disease notification and compliance with standards relating to international trade).

Lastly, the OIE encourages all Member Countries to ensure that the curriculum used by veterinary education establishments worldwide provides an overview of aquatic animal health issues

Focal Points receive information from the OIE in support of their work, notably through the regional seminars that are regularly held for the Focal Points of the OIE's 178 Member Countries. These seminars also provide an opportunity for Focal Points to develop regional or global networks, exchange information, share experiences and facilitate cooperation between countries that so wish.

Lastly, the OIE encourages all Member Countries to ensure that the curriculum used by veterinary education establishments worldwide provides an overview of aquatic animal health issues.

To publicise all these opportunities worldwide and to strengthen their application, the OIE organised a World Conference in Panama in 2011 on aquatic animal health and disease prevention and control methods. Over 110 countries participated in the Conference and passed a resolution encouraging the OIE to strengthen its efforts in the aforementioned fields (www.oie.int/eng/A_aquatic/en_presentations.htm). This acknowledgment of the role of the OIE has enabled the Organisation to maintain its existing strategies and seek international donors to provide the necessary resources to support developing countries. It is clearly in the interests of developed countries that are free from diseases to protect themselves from potential sources of infection by helping those countries that still have disease problems to resolve them as quickly as possible.

Bernard Vallat
Director General, OIE

Expected benefits of aquaculture and the challenge of antimicrobial use

This article is published in two parts. Part 1 identifies the expected benefits of aquaculture and the challenge of antimicrobial use and Part 2 discusses the measures that are being taken to manage the challenge of antimicrobial use. Part 2 of this article will be published subsequently in Bulletin *3-2012.*

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The use of antimicrobial agents in aquaculture and its potential to contribute to antimicrobial resistance raises important issues relating to public health and food safety, and animal health and production. This article discusses challenges and management approaches, with a focus on the international standard-setting work of the OIE.

Since 2010 the OIE *ad hoc* Group on the Responsible Use of Antimicrobials in Aquatic Animals has held several meetings. Based on specialist advice from this Group, and as proposed by the Aquatic Animal Health Standards Commission, the World Assembly has adopted new standards in the *Aquatic Animal Health Code*, i.e. Chapter 6.2., 'Introduction to the recommendations for controlling antimicrobial resistance' and Chapter 6.3. 'Principles for responsible and prudent use of antimicrobial agents in aquatic animals'.

This standard-setting work is ongoing. Two new chapters, which address 'Monitoring quantities and usage patterns..' and 'Development and harmonisation of surveillance and monitoring programmes', have been proposed for adoption at the 80th OIE General Session in May 2012. The application of risk analysis to antimicrobial resistance in aquatic animals will be the subject of future OIE guidance.

Expected benefits of aquaculture – a blue revolution

Much has been written about promises due to the development of aquaculture in the last fifty years. Indeed, the total food fish supply derived from aquaculture is now poised to eclipse the amount derived from capture fisheries. According to the latest report from the Food and Agriculture Organization (FAO)[1], aquaculture now accounts for 46% of the world's food fish production. Since 1950, world aquaculture output has increased substantially, from less than 1 million tonnes of annual production to 52.5 million tonnes with a market value of US$ 98.4 billion reported for 2008. This growth rate is three times that of world meat production (2.7% from poultry and livestock together) in the same period. In contrast to world capture fisheries production, which has almost stopped growing since the mid-1980s, aquaculture has maintained an average annual growth rate of 8.3% worldwide between 1970 and 2008. The result has been an increase in the average annual *per capita* supply of food fish from aquaculture for human consumption by ten times, from 0.7 kg in 1970 to 7.8 kg in 2008 – with an average annual growth of 6.6% per year.

Nevertheless, in spite of increased consumption of fish and improvements in general nutritional standards, a significant problem with undernourishment remains, especially in many developing countries. FAO's current estimate of the number of undernourished people in the world in 2008 is 1.02 billion people, which represents more hungry people than at any time since 1970[2].

Paradoxically, many people in countries around the world, including developing countries, suffer from obesity and diet-related diseases attributed to excessive consumption of high-fat and processed products, as well as to inappropriate dietary and lifestyle choices. Increased production and consumption of fish, with their high-feed conversion ratios, lean products and relatively higher increased levels of omega 3 fatty acids, have been highlighted as a way to alleviate poverty, improve food security and enhance the health of the world's population.

In August 2003, *The Economist* magazine published articles[3, 4] that described the potential and the challenges of fish farming (aquaculture) as a 'blue revolution'. These often-cited articles identified modern aquaculture as an emerging new industry, benchmarking its development against that of centuries-old terrestrial-based agriculture and the rise of commercial agriculture (the 'green revolution'):

'Aquaculture's promise is that, within the next three decades, it could produce most of the world's marine produce. At the same time it could help to alleviate poverty and food shortages in some of the world's poorest countries. And if it is done well, it could help to safeguard marine resources for future generations.'

1- All statistics/information referenced in paragraphs 1 & 2 are taken from *The State of World Fisheries and Aquaculture 2010*. FAO, Rome, 2010, 197 pp.
2- www.fao.org/publications/sofi-2010/en/
3- www.economist.com/node/1974103
4- www.economist.com/node/1974450

Against the backdrop of the success of land-based agriculture in contributing to a remarkable increase in world food production over the past century, the articles contrast the environmental consequences as farming and animal production systems were developed, implemented and refined.

'If modern agriculture were invented today, it probably wouldn't be allowed. It pollutes the environment with pesticides, fertilisers and nutrients from feed and animal waste. Farming damages wild habitats and wildlife. And domesticated animals are stocked at high densities and pumped full of growth hormones and antibiotics, with the result that they are often unhealthily fatty compared with their wild relatives'

However, the articles go on to point out the fact that at this moment in history we have considerably more knowledge and information than at any point in the past to be able to address environmental, animal production, and human health challenges and that the promise of aquaculture should not be diminished by mistakes and unsuccessful ventures along the learning curve. Innovation and thoughtful international regulation may be the keys to unlock the potential of this new technology.

The demand for high-quality, sustainable sources of protein is growing and will likely continue to grow, as populations in developing countries and emerging economies increase in size and purchasing power. The need for reliable supplies and demand for high-value species of fish, crustaceans, and molluscs will also influence trends in seafood production. Sustainable production methods, traceability, and enhanced food safety are factors that will also play a role in the future of seafood production.

The challenges of aquaculture

Aquaculture is very diverse and there has been an increase in the number of cultured species and culture systems over the years. According to the FAO FishStat database, 442 different species have been cultured at some time between 1950 and 2004. Since 1950 the number of species cultured has grown from 72 to 336 in 2004, for an average annual introduction of approximately five new species each year. The introduction of new species often results in the development of new or modified culture systems and a learning curve, during which producers may experience increased disease outbreaks in species under intensive culture.

Although there is considerable diversity in species and culture systems, aquaculture operations share common characteristics of

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rearing aquatic species in density and often apply intensive management designed to optimise feed efficiency and decrease time to harvest. These drivers, in combination with knowledge gaps as new species come under culture or as new culture systems are being developed, can lead to sub-optimal conditions for health; the result being disease outbreaks that have the potential to decimate entire populations of animals and result in economic catastrophe for producers.

Poor husbandry/management, poor water quality, inadequate nutrition and knowledge gaps set the stage for outbreaks of primary or opportunistic pathogens. Knowledge gaps are magnified when the services of veterinarians or aquatic animal health professionals are not available or utilised. Diagnosis and treatment are constrained by the lack of standardised methods for antimicrobial susceptibility testing (AST), a lack of approved/clinically tested therapeutics and vaccines, and effective routes of administration to mixed populations of healthy, sick, and moribund animals.

Currently, world aquaculture is heavily dominated by the Asia – Pacific region, which accounts for 89% of production in terms of quantity and 79% in terms of value. Emerging and developing countries, in particular China, Thailand and Vietnam, accounted for 80% of world fishery production in 2008 with their exports accounting for 50% (US$ 50.8 billion) of world exports of fish and fishery products in value terms. Japan, the United States of America and the European Union (EU) are the major markets, with a total share of about 69% in 2008.

Despite careful management and appropriate use in some sectors, the cost and availability of antimicrobials in other areas presents an attractive option to producers seeking to offset knowledge gaps, systems problems, or pursuit of unsustainable performance levels. Complicated by the fact that a significant proportion of the world's aquaculture production occurs in areas that lack veterinary legislation and regulatory infrastructure, the potential for the misuse or overuse of antimicrobials is a significant concern.

Misuse or overuse of antimicrobials has the potential to lead to unacceptable residues in food products as well as the selection and dissemination of resistant microorganisms and resistance determinants. The risk factors for the development of antimicrobial resistance in terrestrial species have been examined intensively over the past 20 years and approaches to risk assessment, risk management and surveillance systems are coming into focus. For aquaculture these elements are only now starting to become developed, and much work still remains.

Antimicrobial resistance – what are the issues for human medicine, terrestrial animal agriculture and aquaculture?

With the use of antimicrobials comes selection pressure on populations of microorganisms. When antimicrobial therapies are misused (inappropriate therapeutic agent and/or target microorganism, ineffective dose/duration) or overused, the possibility of selecting resistant microorganisms is increased. In addition, there is considerable evidence to show that resistance determinants are shared, not only between phylogenetically related microorganisms, but unrelated microorganisms as well, including both pathogens and commensal species. This phenomenon is described as the horizontal transfer of resistance determinants.

Humans and animals risk the consequences of adverse health effects when exposed to resistant microorganisms or resistance determinants through ingestion, particularly consumption of food products; contact with skin or mucous membranes; inhalation; or inoculation. Serious adverse health consequences associated with infections caused by resistant microorganisms include increased duration and severity of illness, and increased frequency of infections. The loss of therapeutic options is also considered to be an adverse consequence associated with the dissemination of resistant organisms.

The risks associated with antimicrobial resistance are well described in human medicine and are becoming better understood in terrestrial animal agriculture. In aquaculture, however, the risks are less well understood. The number of zoonotic, pathogenic bacteria shared between humans and aquatic species is fewer than in terrestrial species and, although consumption of seafood is increasing, the exposure as a dietary component is generally less than for food products from terrestrial species. Nevertheless, the possibility for the development of a reservoir of resistant bacteria and dissemination of resistance determinants through horizontal gene transfer has been pointed out as the most significant risk associated with the use of antimicrobials in aquaculture[5].

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5- Report of a joint FAO/OIE/WHO expert consultation on antimicrobial use in aquaculture and antimicrobial resistance: 13-16 June 2006, Seoul, Republic of Korea.

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The challenges of antimicrobial resistance in aquaculture

Evaluating the extent to which antimicrobial use in aquaculture may impact a reservoir of resistance determinants and then assessing the potential for those resistance determinants to be transmitted to microorganisms of human health concern is a challenge that will need to be addressed. Currently, advancement in this area is complicated by a lack of microbiological culture and AST methods for aquatic bacterial pathogens and inadequate understanding of complex exposure pathways. What is of importance are trends in the frequency and distribution of resistance among populations of microorganisms in locations where human and animal use of antimicrobials is occurring; understanding how these microorganisms may come into contact with humans and animals, and how they cause adverse health effects.

To be able to assess when a resistance determinant begins to flourish within a population of microorganisms or to determine when a population of bacteria is susceptible or resistant to antimicrobials, it is necessary to be able to culture microorganisms and test their response to antimicrobial agents in a standardised and repeatable way. For microorganisms of human health significance and to a large extent for terrestrial animals, standardised methods exist. For many aquatic bacteria, such methods are not yet available. However, important contributions to this field are beginning to be made, such as methods for Group 1 aquatic bacteria published by the Clinical and Laboratory Standards Institute (CLSI)[6]. Approaches to the development of AST methods exist and prioritised lists of bacteria are starting to be suggested.

Other important elements that are beginning to be understood are the complex exposure pathways by which bacteria are exposed to antimicrobials[7] (direct application of antimicrobials, terrestrial agricultural run-off, human waste discharge) and by which humans and animals may be exposed to resistant microorganisms (direct contact through skin and mucous membranes, contamination of food

6- M42-A, Vol. 26, No. 23. Methods for Antimicrobial Disk Susceptibility Testing of Bacteria Isolated from Aquatic Animals; Approved Guideline.
M49-A, Vol. 26, No. 24. Methods for Broth Dilution Susceptibility Testing of Bacteria Isolated from Aquatic Animals; Approved Guideline.
7- Martinez J.L. (2012). – Bottlenecks in the transferability of antibiotic resistance from natural ecosystems to human bacterial pathogens, *Frontiers in Microbiology*, Vol. 2, Article 265.

animals/products in the pre- and post-harvest phase). Aquatic pathways are complex and myriad and understanding them is essential to be able to make causal relationships between trends in resistant populations and selection pressure from various antimicrobial uses/exposures.

Why should we take measures to monitor and control antimicrobial use in aquaculture?

Because of the importance of aquaculture to the world's food supply, the expenditure of resources to address the challenges of antimicrobial use in aquaculture, as part of a larger effort to enhance food safety and animal health and ensure sustainable practices, is likely to be a good investment. Despite a long tradition of aquaculture practices in a few countries over many centuries and the recent growth surge of the past 30 years, aquaculture is still a young food production sector. Filling gaps in scientific knowledge and technical expertise along with establishment of aquatic animal health and regulatory infrastructure will help the sector to avoid significant public health and animal health problems and maintain effective therapies for human and animals.

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*This article reflects the views of the author and should not be construed to represent views or policies of the United States Food and Drug Administration.

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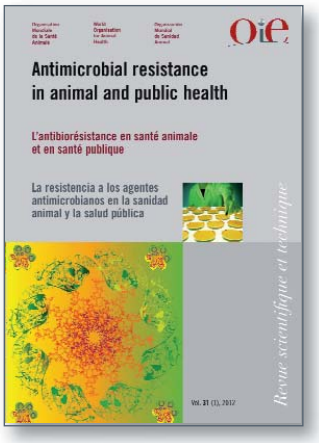

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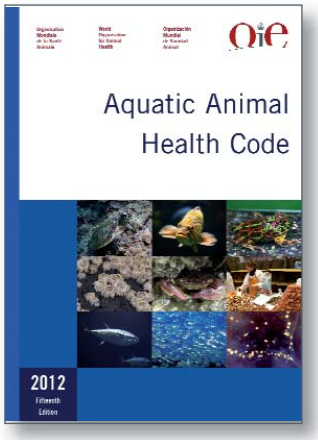
OIE Scientific and Technical Review
Vol. 31 (1)

Co-ordinators and Editors: J.F. Acar & G. Moulin

Antimicrobial resistance in animal and public health

Bacterial strains resistant to one or more antibiotics are now found everywhere and antimicrobial resistance is a complex and evolving phenomenon that has the potential to cause serious animal and public health problems at international level. Containment of bacterial resistance is becoming an important goal in human medicine, considering the nosocomial infections and resistant pathogens acquired in the community. Since 1997, the World Organisation for Animal Health (OIE) has recognised the need to work on curtailing antimicrobial resistance, to find an appropriate balance between the need to use antimicrobials to promote animal health, production and welfare and the risk of antimicrobial resistance. It is important to work towards this goal. It is also important to consider the responsibilities of the regulatory authorities and international organisations that work in this area. In addition, risk management measures and strategies for the prudent use of antimicrobials have now been introduced and it is crucial to understand the impact that they have had.

The focus of this *Review* is to address the various factors that must be taken into account when trying to understand the antimicrobial resistance problem, with a particular focus on the use of antimicrobials in animals.



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(also in Spanish and French)
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Aquatic Animal Health Code

The aim of the *Aquatic Animal Health Code (Aquatic Code)* is to contribute to improving the health and welfare of aquatic animals (amphibians, crustaceans, fish and molluscs) worldwide, to ensure that products derived from them are safe for human consumption, and to assure the sanitary safety of international trade in aquatic animals and their products. This is achieved through the detailing of health measures in the *Aquatic Code*. The Competent Authorities of importing and exporting countries should use the OIE standards to avoid the transfer of agents pathogenic for aquatic animals or humans, while avoiding unjustified trade barriers.

The value of the *Aquatic Code* is twofold: firstly, the sanitary measures recommended are the result of consensus among the Veterinary Authorities of OIE Members, and secondly, it constitutes a reference within the WTO SPS Agreement as an international standard for animal health and zoonoses of aquatic animals. The 2011 version of the *Aquatic Code* is still available on the Web site at www.oie.int/en/international-standard-setting/aquatic-code/access-online/ and the 2012 version is scheduled for release in September 2012.

IE news
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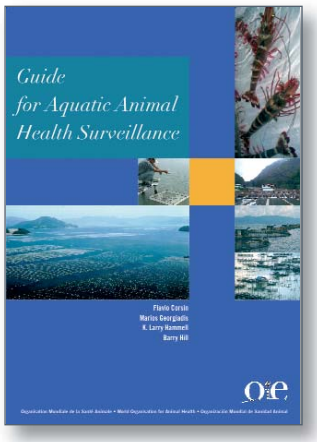

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Price: €**50**

Guide for Aquatic Animal Health Surveillance

Edited by F. Corsin, M. Georgiadis, K.L. Hammell & B. Hill

Efficient and reliable surveillance systems generate sound evidence for disease incidence, prevalence and distribution, or for demonstrating disease absence. Science-based decisions regarding the health of aquatic animals rely on the information generated by surveillance programmes.

This practical handbook about surveillance is intended to be used mainly by Veterinary Services or other Competent Authorities, their staff and experts, for designing, implementing, and evaluating surveillance systems for diseases of relevance for aquatic animals in their country.

news from headquarters

Staff movements

Arrivals

Accounts Unit
Gilles Seigneurin

Following the changes in Mme Alix Weng's responsibilities, and since 1 January 2012, Mr Gilles Seigneurin has now become the head of the OIE Accounts Unit. In addition to managing Headquarters' accounts, and auditing the accounts of the Regional and Sub-Regional Representations, one of his first and most important tasks will be to prepare for the transition from cash accounting to accrual accounting in 2013.

Scientific and Technical Department
Dr Marta Martinez Avilés

Dr Marta Martinez Avilés is a Spanish veterinarian with post-graduate training in Epidemiology (MSc and PhD), who joined the Scientific and Technical Department of the OIE on 1 December 2011. She has experienced the working environment, as well as research and academia related to animal health, in the United Kingdom, France, Spain and New Zealand. In particular, she has been involved in the development of risk assessments and scientific advices on OIE notifiable diseases, specifically to inform disease control and surveillance plans, at the international, national and local veterinary levels in Europe. Dr Martinez Avilés will be responsible for matters involving the work of the Scientific Commission for Animal Diseases.

Arrivals

Animal Health Information Department

Dr Manuel Sánchez Vázquez

Manuel Sánchez Vázquez is a Spanish citizen and joined OIE Headquarters as Deputy Head of the Animal Health Information Department on 1 December 2012.

His professional career has been divided between Spain and the United Kingdom. He graduated as a veterinarian at the Universidad Complutense (Madrid, 1999) and in 2006 completed an MSc in Veterinary Epidemiology at the London School of Hygiene and Tropical Medicine and Royal Veterinary College (London). He started his career working in small animal practice in Madrid but was soon recruited to work as a veterinary technical adviser for the Spanish National Union of Farmers (COAG).

After that experience, and a brief period as an official veterinarian during the 2001 foot and mouth disease episode in the United Kingdom, Dr Vázquez started working in animal disease diagnosis in a laboratory in Spain (*Laboratorio Veterinario Sil-Ex*).

Back in the United Kingdom, he worked for a time in the Meat Hygiene Service and in 2004 joined IDEXX laboratories to work as a pathologist until 2007, when he was recruited by the Epidemiology Research Unit of the Scottish Agricultural College (SAC). At the SAC, he became involved in national epidemiological studies to investigate the occurrence of pig diseases, using data generated by the industry. Dr Vázquez remained at the SAC until his move to Paris to serve at the OIE.

Dr Marija Popovic

Dr Marija Popovic joined the OIE on 1 December 2011 as Chargée de Mission at the Animal Health Information Department, principally to reinforce the team on *WAHIS-Wild*, the active search and verification procedure for non-official information related to wildlife diseases and the common OIE/WHO/FAO project – GLEWS (Global Early Warning and Response System for Major Animal Diseases including Zoonoses).

Dr Popovic graduated from the Faculty of Veterinary Medicine, University of Belgrade, in 2004. She began her professional career at that same faculty, in the Department for Animal Infectious Diseases.

In 2006, Dr Popovic joined the Veterinary Directorate of the Ministry of Agriculture, Trade, Forestry and Water Management of the Republic of Serbia. As Animal Identification and Registration Coordinator, she was responsible for developing the animal identification and registration system, as well as the national animal disease notification system, its legal basis, operating procedures and user manuals, forms and web-based software applications, as part of the Veterinary Management Information System.

Dr Vera Cecilia Ferreira de Figueiredo

Dr Vera Cecilia Ferreira de Figueiredo joined the Animal Health Information Department on 12 December 2011 as Chargée de Mission, on secondment from the Brazilian Ministry of Agriculture, Livestock and Food Supply.

After graduating in Veterinary Medicine in Brazil, Dr Vera Cecilia Ferreira de Figueiredo specialised in experimental pathology, sanitary surveillance and epidemiology. She worked at the Butantan Institute de São Paulo and in 2004 completed a Master in Public Health at the University of São Paulo.

In 2002 she joined the Official Veterinary Service of the Brazilian Ministry of Agriculture, Livestock and Food Supply; working in the Department of Animal Health in activities related to National Health Programmes, and served as Chief of the Epidemiology Division from 2005 to 2011, when she was seconded to support the work of the Animal Health Information Department of the OIE in its various activities.

Activities of the Communication Unit

Salon international de l'Agriculture [International Agricultural Show]

Paris, 25 February – 5 March 2012

To celebrate World Veterinary Year in 2011, the OIE and the European Commission (EC) worked together to promote and raise awareness of the veterinary profession to the general public. The campaign was marked with a joint OIE/EC stand at the Salon international de l'Agriculture 2011, in Paris (France). The success of this promotion has persuaded the two partners to renew this campaign in 2012, with an accent on animal wellfare.

© OIE/EC

The OIE Council at the joint OIE and European Commission stand at the *Salon international de l'Agriculture*

Activities of the Communication Unit

Among the various activities brought to the attention of the public, the presence of celebrity chefs from the French television programme, Top Chef, demonstrating cooking activities for children, proved a particularly big hit. A competition on Facebook also allowed a member of the public to prepare a selection of dishes with top chef Pierre Sang Boyer, which was offered to all the visitors at the evening opening of the Show on Friday, 3 March.

© OIE/EC

Pierre Sang Boyer of *Top Chef* livens up the stand in the presence of the European Commissioner for the Directorate General for Health and Consumers, John Dalli, and the Director General of the OIE, Dr Bernard Vallat

Agreement between the OIE and the European Union (EU)

Paris, 25 February 2012

© Pozdrawiam Andrzej Mitura

Dr Bernard Vallat and Commissioner John Dalli confirm their shared commitment on animal health policies

To deepen and strengthen the cooperation and collaboration between the OIE and the EU of recent years, the two organisations signed a draft agreement formalising their relations during International Green Week in Berlin (Germany).

As guest of honour at the pavilion of the EC Directorate General for Health and Consumers (DG SANCO), the Director General of the OIE, Dr Bernard Vallat, confirmed the OIE's commitment to animal health and well-being throughout the world.

Students visit from around the world

Every year, the OIE presents its activities to groups of veterinary medical and public health students from all over the world. One of the most consistent programmes, called 'Engaging International Organisations', this year demonstrated its increasing breadth with an even greater number of participants, from more regions of the world, and an ever-fuller programme.

The Royal Veterinary College of Britain also highlighted the importance of OIE activities to its students, during a visit which put the emphasis on the standard-setting procedure and food security and safety.

Activities of the Scientific and Technical Department

Summaries of the OIE *ad hoc* Group, Specialist Commission and Working Group Meetings

January to March 2012

Ad hoc Group on Rabies Vaccine Quality

OIE Headquarters, Paris, 10-12 January 2012

The Group revised and updated part C of Chapter 2.1.13., 'Rabies', of the *Terrestrial Manual*. It decided to have two separate sub-sections, one on injectable vaccines and the other on oral vaccines. At this meeting, only injectable vaccines were addressed. The meeting decided that nerve-tissue vaccines should still be described but their use was discouraged, due to unreliable safety and poor efficacy. It also implemented the 3R principles (replacement, reduction and refinement) and thus included, in addition to the potency test in animals, an alternative serological test for potency. This serological test, however, is not yet validated for each vaccine manufacturer.

The revision of the oral vaccine description was deferred to the next meeting of the Group and it was suggested that new experts should be invited for this discussion.

Ad hoc Group on the Scientific Partnerships among OIE Reference Centres: Networking

OIE Headquarters, Paris, 17-19 January 2012

Since the adoption of the new OIE *Basic Texts* in May 2011, OIE Reference Centres have been mandated to form networks. The Group proposed a new document on *Guidance for the Management of OIE Reference Centre Networks*, focusing on Reference Laboratories as it was considered that this was where guidance was primarily needed. The Group decided to merge the existing document on *OIE Criteria for Inclusion of Network Website Links on the Website of the OIE* within the draft guidance document produced. The guidance document would be made available on the OIE website, and its scope would easily be expandable to Collaborating Centres.

Ad hoc Group on Diseases of Honey Bees

OIE Headquarters, Paris, 31 January – 2 February 2012

The Group reviewed and replied to the technical comments received from OIE Member Countries on the proposed updates of the *Terrestrial Code* chapters related to bees. The Group also reviewed Chapter 5.10., and, in particular, Articles 5.10.4. and 5.10.5., which were relevant to bees, and considered that there was no need for revision of the certificates for the time being. Finally, the Group started to develop a general introductory text with the aim of providing background information for the disease-specific chapters of the *Terrestrial Code*. However, due to time constraints, the Group did not have time to finalise the text. A further meeting will be organised to complete the on-going work.

Ad hoc Group on the Evaluation of Foot and Mouth Disease (FMD) Status of Member Countries

OIE Headquarters, Paris, 31 January – 3 February 2012

At this meeting, the Group addressed the urgent need to redraft Chapter 8.5. on foot and mouth disease (FMD) in the OIE *Terrestrial Code*. Among the issues discussed for the redrafting was the important topic of the wildlife-livestock interface, after recent developments in which wild boar that could not be separated from domestic livestock seemed to have been involved in outbreaks. The protection of valuable animals, such as zoo animals, using vaccination in an FMD-free country or zone, was also discussed. The Group also evaluated pending country applications (for an OIE-endorsed official control programme for FMD), including additional information received from the applicant Member Countries.

Activities of the Scientific and Technical Department

Biological Standards Commission

OIE Headquarters, Paris, 8-10 February 2012

The Commission met at the OIE Headquarters under the chairmanship of its President, Prof. Vincenzo Caporale, and addressed, among other issues, the designation of OIE Reference Centres, accepting six requests for the designation of new Reference Laboratories. These requests were submitted for endorsement by the OIE Council. From May 2012, all OIE Reference Centre proposals would be adopted by the Assembly through a formal Resolution.

Demand for OIE Laboratory Twinning remained high, with at least 15 applications in the pipeline. As some projects came to an end, post-twinning activities became important: three successful post-twinning workshops had taken place, which aimed to set a direction for post-twinning activities in Candidate Laboratories and to promote them as centres of expertise in their regions. The Commission approved the technical content of two twinning proposals.

The Commission endorsed the reports of the following *ad hoc* Groups on:
– Biosafety and Biosecurity in Veterinary Laboratories, 19–21 September 2011
– Scientific Partnerships among OIE Reference Centres: Networking, 17–19 January 2012.

The *ad hoc* Groups on Rift Valley Fever and on Vaccine Quality related to Rabies would continue to work on revising their respective *Terrestrial Manual* chapters.

In relation to international standardisation/harmonisation, the Commission provided a favourable opinion for the inclusion of a new diagnostic kit in the OIE register. Following a request from the OIE expert, the Commission agreed that the mallein test should no longer be listed as a prescribed test for glanders in international trade.

The Commission reported that the seventh edition of the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* would be published in the third or fourth quarter of 2012.

During 2011, the joint OIE-FAO network of expertise on animal influenza, OFFLU, provided support to the WHO vaccine strain selection process by presenting antigenic, genetic and epidemiological data at the two annual WHO meetings, and by participating in another meeting aimed at improving the overall WHO vaccine strain selection process. OFFLU also collaborated with WHO over proficiency testing, the WHO Polymerase Chain Reaction Working Group, the H5N1 Evolution Working Group, and the Influenza Naming Task Force. A swine influenza group has been launched to serve as a platform for sharing global swine influenza data and for coordinating and harmonising approaches to swine influenza surveillance worldwide. The first meeting was held in April 2011 and the second meeting was planned for March 2012.

Finally, the Commission endorsed the conclusions and recommendations of the Expert Surveillance Panel on Equine Influenza Vaccine Composition on the composition of equine influenza vaccines for 2011 (see Epidemiology and Animal Disease Control Programmes in this *Bulletin*, pages 46-47).

Ad hoc Group on the Emergence of a New Orthobunyavirus in Europe (provisionally named 'Schmallenberg virus')

OIE Headquarters, Paris, 9 February 2012

Following the emergence of Schmallenberg virus in Europe, some Member Countries took provisional trade-restrictive measures. In this context, the OIE decided to convene this meeting to review current knowledge on the virus, while being aware that any available information is as yet limited and that more evidence would become available in the coming months. The Group proposed recommendations to avoid the potential spread of the disease through trade in animals and animal products. It also produced an OIE factsheet, providing the most up-to-date knowledge on Schmallenberg and other similar viruses, and identified priority areas for further research and data collection. Their conclusions have been submitted to the Scientific Commission for Animal Diseases.

Ad hoc Group on Biosafety and Biosecurity in Veterinary Laboratories

OIE Headquarters, Paris, 13-15 February 2012

The Group met for the second time and reviewed draft chapters 1.1.1. on 'Collection and storage of diagnostic specimens', and 1.1.3. on 'Standard for managing biorisk in veterinary laboratories and animal facilities' of the *Terrestrial Manual*, developed by the members of the Group through email communications since the first meeting. Chapter 1.1.1. received the support of OIE epidemiology experts, and the Group suggested a further meeting to finalise these two chapters. For Chapter 1.1.2. on 'Transport of infectious substances', the Group agreed that the best approach would be to follow and adapt, if necessary, the guidance on regulations for the transport of infectious substances developed by WHO, a compilation of the applicable international regulations that is regularly updated.

Scientific Commission for Animal Diseases

OIE Headquarters, Paris, 13-17 February 2012

The Commission met at the OIE Headquarters under the chairmanship of its President, Dr Gideon Brückner, and addressed the following issues:

– the Generic Checklist on Compartmentalisation
– draft guidelines for General Principles for Disease Control
– requests from Member Countries for designation of Collaborating Centres
– the involvement of members of the Working Group or selected wildlife experts in relevant *ad hoc* Groups where wildlife played a role in the epidemiology of the disease
– a Schmallenberg virus update with the latest scientific information
– potential OIE expert missions and other issues relevant to the evaluation of official country status
– the endorsement of official control programmes for foot and mouth disease
– amendments to Resolution XXII (76th General Session, May 2008).

The Commission also reviewed the reports of the following *ad hoc* Groups on:

– Epidemiology
– Evaluation of the Foot and Mouth Disease Status of Member Countries
– Evaluation of the Bovine Spongiform Encephalopathy Risk Status of Member Countries
– Official Disease Status Recognition for Classical Swine Fever
– Invasive Animal Species
– Honey Bee Diseases
– Schmallenberg Virus.

Finally, the Scientific Commission and the Code Commission held a joint meeting which addressed several supplementary topics and aspects of chapters of the *Terrestrial Animal Health Code* (*Terrestrial Code*). Further, the Scientific Commission addressed a number of OIE Member Countries' comments on *Terrestrial Code* chapters that were then forwarded to the Code Commission.

Technical Consultation on the Development of the OIE PVS Pathway tool for Veterinary Laboratories

OIE Headquarters, Paris, 28 February – 1 March 2012

This was the second meeting of a small expert group that is examining options for developing a pilot step in the PVS pathway to specifically address the needs of national Veterinary Services with respect to laboratories. This meeting aimed to define the way forward for the OIE PVS Pathway tool for Veterinary Laboratories and establish a timeline for developing the laboratory methodology and tools required. The meeting assessed the work done to date on laboratory tools and the assessment process for laboratories in the PVS Pathway; discussed the strategy for and approach to the development of the laboratory tool and potential pilot missions; defined objectives for each of the necessary elements: tool development, approach and pilot mission(s); outlined a timeline and defined the steps needed in order to develop/expand the laboratory component from the OIE PVS Gap Analysis tool.

Activities of the International Trade Department

Summaries of the OIE *ad hoc* Group, Specialist Commission and Working Group Meetings

January to March 2012

Ad hoc Group on Veterinary Education

OIE Headquarters, Paris, 11-13 January 2012

The OIE *ad hoc* Group on Veterinary Education held its fourth meeting from 11 to 13 January 2012. The Group addressed OIE Member comments on the list of minimum competencies and discussed future work on 'OIE Guidelines on Twinning Projects for Veterinary Education Establishments (VEE)'.

The *ad hoc* Group finalised the document on 'Minimum competencies expected of Day 1 Veterinary Graduates to assure the delivery of high-quality national Veterinary Services' and drafted a new document on 'Post-graduate and continuing education for graduate veterinarians to assure ongoing delivery of high-quality national Veterinary Services'.

The Group also agreed to prepare a document to be used as a basis for the core curriculum within VEE, including a reference to the 'Day 1 Competencies' document and introductory comments for each subject identified in this curriculum.

It was agreed that the next meeting would take place at OIE Headquarters in Paris from 24 to 25 July 2012.

Ad hoc Group on Veterinary Legislation

OIE Headquarters, Paris, 17-19 January 2012

The *ad hoc* Group on Veterinary Legislation met from 17 to 19 February 2012, and addressed OIE Member comments on the draft of Chapter 3.4., 'Veterinary legislation'. These comments had been received from Member Countries after the meeting of the Terrestrial Animal Health Standards Commission in September 2011, and the draft chapter was revised to take them into account.

In response to the concerns expressed by some Member Countries, that the draft chapter could result in unjustified trade barriers, the Group noted that, on the contrary, this chapter would provide a firm basis for national legislation to comply with the OIE standards, which can help to eliminate unjustified trade barriers.

The Group also noted that the Secretariat of the WTO SPS Committee had asked the OIE to include text on the obligation of WTO Members to notify changes in their sanitary measures to the WTO. Accordingly, the text in the draft chapter was amended to reflect this point.

The *ad hoc* Group submitted the revised draft Chapter 3.4. to the Terrestrial Animal Health Standards Commission for its review and approval.

Ad hoc Group on the OIE List of Aquatic Animal Diseases (finfish team)

Work done by exchange of e-mail, January and February 2012

The *ad hoc* Group reviewed the additional information provided by Chile for criteria 6 and 7 of the 'Criteria for Listing Aquatic Animal Diseases', provided in Article 1.2.1. of the *Aquatic Animal Health Code*, to support the listing of pancreas disease. The Group concluded that there was evidence that the virus could be spread by trade, so criterion 6 was therefore met. As for criterion 7, the *ad hoc* Group concluded that, while the information provided by Chile suggested that several countries or zones may possibly be in a position to declare freedom from the disease, the evidence presented was insufficient to demonstrate conclusively that any of the countries identified were free from pancreas disease. The Group thus concluded that pancreas disease does not meet the criteria for listing, and its report was submitted to the Aquatic Animals Commission for consideration at its meeting in March 2012.

Ad hoc Group on the Responsible Use of Antimicrobials in Aquatic Animals

OIE Headquarters, Paris, 31 January – 2 February 2012

The *ad hoc* Group considered Member Country comments on the two new draft chapters, Chapter 6.4., 'Monitoring of the quantities and usage patterns of antimicrobial agents used in aquatic animals', and Chapter 6.5., 'Development and harmonisation of national antimicrobial resistance surveillance and monitoring programmes for aquatic animals', and made relevant amendments. The Group report was submitted to the Aquatic Animals Commission for consideration at its meeting in March 2012.

Terrestrial Animal Health Standards Commission

OIE Headquarters, Paris, 14-23 February 2012

The Commission met from 14 to 23 February 2012 in Paris, to address comments received from Member Countries after its September 2011 meeting, as well as to review work done by the OIE *ad hoc* Groups (Veterinary Legislation, Veterinary Education and Zoonotic Parasites) and the OIE Animal Production Food Safety Working Group. The Commission also held a meeting with the Scientific Commission for Animal Diseases.

The Commission reviewed a number of existing *Terrestrial Code* chapters and new draft chapters. New or revised texts will be proposed for adoption at the 80th General Session in May 2012 on: the glossary; notification of diseases and epidemiological information; criteria for listing diseases; animal health surveillance; procedures for self declaration and for official recognition by the OIE; import risk analysis; evaluation of Veterinary Services; communication; veterinary legislation; the application of compartmentalisation; the collection and processing of bovine, small ruminant and porcine semen; the collection and processing of *in vivo*-derived embryos from livestock and horses; hygiene and disease security procedures in apiaries; OIE procedures that are relevant to the WTO Agreement on the Application of Sanitary and Phytosanitary Measures; model international veterinary certificates for dogs and cats originating from rabies-infected countries; biosecurity procedures in poultry production; the harmonisation of national antimicrobial resistance surveillance and monitoring programmes; monitoring the quantities of antimicrobials used in animal husbandry; zoonoses transmissible from non-human primates; an introduction to the recommendation for animal welfare; use of animals in research and education; a model health certificate for laboratory animals; animal welfare and beef cattle production systems; Aujeszky's disease; rabies; avian influenza; African horse sickness; equine influenza; equine viral arteritis and rabbit haemorrhagic disease.

The Commission also reviewed the new OIE Guidelines for assessing the risk of non-native animals becoming invasive, which were developed by an OIE brainstorming meeting held from 30 November to 1 December 2011. The Commission recommended that the OIE publish the Guidelines, preferably on the OIE website.

Activities of the International Trade Department

Aquatic Animal Health Standards Commission

OIE Headquarters, Paris, 5-9 March 2012

The Aquatic Animal Health Standards Commission (the Commission) addressed Member comments received after its last meeting in October 2011, and reviewed the work of two OIE groups: the *ad hoc* Group on the OIE List of Aquatic Animal Diseases (Finfish Team) and the *ad hoc* Group on the Responsible Use of Antimicrobials in Aquatic Animals.

The Commission plans to draft texts for adoption at the 80th OIE General Session in May 2012 on the following topics: the glossary; Notification of diseases and epidemiological information (Chapter 1.1.); Criteria for listing aquatic animal diseases (Chapter 1.2.); Diseases listed by the OIE
(Chapter 1.3.); Import risk analysis (Chapter 2.2.); Communication (new Chapter 3.2.); an example article to be applied to all disease-specific chapters under point 1 of Articles X.X.12. (amphibian and fish disease chapters) and X.X.11. (crustacean and mollusc disease chapters); Monitoring of the quantities and usage patterns of antimicrobial agents used in aquatic animals (new Chapter 6.4.); Development and harmonisation of national antimicrobial resistance surveillance and monitoring programmes for aquatic animals (new Chapter 6.5.); Welfare of farmed fish during transport (Chapter 7.2.); Welfare aspects of stunning and killing of farmed fish for human consumption (Chapter 7.3.); Killing of farmed fish for disease control purposes (new Chapter 7.4.); and Disinfection of salmonid eggs (Articles 10.4.13., 10.5.13. and 10.9.13.).

At the 80th General Session, the Commission will seek Member comments on the following texts: Chapter 6.1., 'Control of hazards in aquatic animal feeds'; Chapter 10.5., 'Infectious salmon anaemia', and Article 1.3.1., 'Listing of infectious salmon anaemia'.

Finally, the Commission also updated its work programme for 2012/2013.

Staff movements

Dr Cipriano is appointed Deputy OIE Regional Represe

Applications were requested for a new Deputy OIE Regional Representative for Africa on the appointment of the former Deputy, Dr Yacouba Samaké, as the new Regional Representative for Africa in April 2011. After completing the recruitment process, the Director General of the OIE appointed Dr Florência Massango Cipriano as Deputy Regional Representative for Africa on 1 January 2012.

Florência Cipriano is a Mozambican national who graduated as a veterinarian from the Eduardo Mondlane University in Maputo in 1986, and gained a Diploma in Tropical Poultry Production from Ghent University, Belgium, in 1989 and a Certificate in Epidemiology, Informatics and Data-handling from the African Union Centre for Ticks and Tick-Borne Diseases in Lilongwe, Malawi, in 2003. In 2011, she completed her post-graduate studies in Public Administration and Governance at Eduardo Mondlane University.

Her professional career spans more than 25 years, during which she has worked in both the public and private sector in both livestock management and veterinary programmes; in particular, the design and implementation of disease prevention and control programmes for private

ntative for Africa

poultry companies and public sector policies for national animal health control programmes. Dr Cipriano is also a specialist in veterinary extension services and the management of Veterinary Services at the local, provincial and national levels. She has also lectured in practical poultry production at the Veterinary Faculty of Eduardo Mondlane University, as well as undertaking consultancy work in the field of animal production and health, and events facilitation.

As an animal health professional, Dr Cipriano has contributed to the design of national animal health legislation and the drafting of aquatic animal health legislation. Her positions have included Head of the Provincial Division of Livestock and Veterinary Services, and Head of the Epidemiology Unit. She served as the National Director for Veterinary Services in Mozambique and became the Delegate of Mozambique to the OIE, a position she occupied from 2006 until her appointment this year. Florência has also been serving on the OIE Council since 2009, a position she gave up on her appointment as Deputy Regional Representative.

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Dr Mapitse OIE Sub-Regional Representative for Southern Africa

Dr Neo Joel Mapitse was born on 26 February 1969 in South Africa and moved to Botswana where he started his education. He joined the OIE after 13 years of service, rising through the ranks of government in Botswana. In August 2010 he was appointed Deputy OIE Sub-Regional Representative for Southern Africa under the aegis of Dr Bonaventure Mtei, gaining much insight into the OIE's work at the sub-regional, continental and international levels. As Deputy, his responsibilities were varied, including technical support and capacity-building programmes for the Southern African Development Community (SADC) and the Central African region's Veterinary Services personnel. Following the retirement of Dr Mtei in late 2011, Dr Mapitse was appointed Sub-Regional Representative from January 2012, leading a strong team of four OIE staff members.

Neo Mapitse qualified as a veterinarian from the University of Glasgow School of Veterinary Medicine in 1996. He completed his MSc in Wild Animal Health in 1999 at the University of London, where he worked on foot and mouth disease virus variants and relationships in African buffalo. He undertook numerous responsibilities during his time with the Botswana Government Veterinary Services, ranging from

being in charge of cattle-restocking health programmes to beef trade negotiations at the national and regional level. Dr Mapitse brings to the OIE his international experience and knowledge of SADC regional animal health and trade policies, which, he hopes, will facilitate the implementation of the OIE`s mandate and vision in Africa.

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New OIE Sub-Regional Representative for North Africa: Dr Rachid Bouguedour

The officials of the OIE Sub-Regional Representation for North Africa (from left to right: Dr Vincent Brioudes, Dr Rachid Bouguedour and Dr Antonio Petrini)

Following a call for applications, the Director General of the OIE has accepted the candidacy of Dr Rachid Bouguedour as the new OIE Sub-Regional Representative for North Africa. Dr Bouguedour was selected for his technical veterinary skills and his experience in managing national Veterinary Services and monitoring OIE programmes.

Before becoming OIE Sub-Regional Representative for North Africa, Dr Bouguedour was the Director of Veterinary Services of the Ministry of Agriculture and Rural Development of Algeria, and had been the Algerian Delegate to the OIE since 1993. He was Vice-President of the OIE Regional Commission for Africa from 1997 to 2000, President of the OIE Regional Commission for Africa in 2000 and has been a member of the OIE Council (the former Administrative Commission) since 2001.

Dr Bouguedour graduated from the National Veterinary School of Algiers in 1981. After post-graduate work at the National Veterinary School of Lyons, France, he took up a teaching post at the National Veterinary School of Algiers, first as an assistant lecturer and then a full lectureship in infectious diseases until 1993, when he was appointed Chief Veterinary Officer (CVO).

Dr Bouguedour has taken a significant role in the development of the veterinary profession in Algeria, where, in his position as CVO, he dealt for example, with such major issues as the privatisation of the veterinary profession, and reforms in veterinary drug legislation.

Among the many highlights of a varied career was his presidency of the Algerian Society of Veterinary Medicine.
Dr Bouguedour was presented with the Meritorious Service Award of the Maghreb Veterinary Union (UMAVET) in 2000.

Dr Rachid Bouguedour can be contacted through:
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Meetings

Asia – Pacific

Progress and lessons learned top the agenda at the 18th SEACFMD Sub-Commission Meeting

Lijiang, Yunnan, People's Republic of China, 5-9 March 2012

The OIE Sub-Commission for Foot and Mouth Disease (FMD) in South-East Asia and China met in Lijiang, People's Republic of China, from 5 to 9 March, to take stock of progress and the lessons learned over the past few years, and to decide how these can best be used to achieve the roadmap objective of an FMD-free region by the year 2020. The meeting also discussed the conditions of use for the FMD and rabies vaccine banks supported by the European Union, which will be first implemented in South-East Asia and used as a model for other regions, if successful.

The Director General of the OIE, Dr Bernard Vallat, noted in his opening remarks that the 2020 roadmap of the South-East Asia and China FMD Campaign (SEACFMD) is not only a good model for other regions still infected by FMD, it can also be used as a template for eradicating other priority animal diseases while supporting good governance of Veterinary Services. The Vice-Minister of Agriculture of the People's Republic of China, Mr Gao Hongbin, opened the meeting by describing how China's efforts in containing major animal diseases through vaccination and culling play an important role in the growth of animal production, as well as in increasing farmers' incomes and promoting faster growth in the rural economy.

Dr Vallat warmly welcomed the great effort made by China to control FMD, as well as the modernisation of its Veterinary Services. As Dr Vallat observed, 'The control of animal diseases is a global public good, as it strongly contributes to food security, food safety, safer world trade, public health and the alleviation of poverty'. The Governor of Yunnan Province, Mr Kong Chuizhu, and the Mayor of Lijiang, Dr He Lianghui, also delivered opening speeches. Some 120 participants attended the meeting, including OIE officials and staff, coordinators from SEACFMD Member Countries, and representatives from donors, international and regional organisations, government agencies and the private sector.

'We're setting off afresh with new learning experiences. This is a new beginning in a whole new

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effort to eradicate FMD by 2020. If we can manage FMD, we can manage any other transboundary animal diseases,' Dr Gardner Murray, president of the OIE Sub-Commission, said.

During the meeting, examples of good practice in FMD control were presented by China, Malaysia, Vietnam and Laos.

Vietnam shared its experience of developing and implementing its national FMD control programme (2011-2015), which received a budget of US$ 31 million from the national government. Recognising that single measures cannot lead to the successful control and elimination of the FMD virus, Vietnam adopted an integrated control programme, using a combination of measures best suited to its existing situation, such as culling infected flocks, controlling animal movement, disinfection, education and vaccination. Vietnam's surveillance programme is crucial in detecting the presence of the virus in vaccinated flocks and to ensure that the existing vaccine strains protect against the various strains of viruses found in the field.

For its part, **China** has put FMD at the centre of its National Mid- and Long-Term Plan on Animal Disease Prevention and Control, which was launched this year. Within the SEACFMD framework, China has adopted compulsory vaccination as a key measure, along with an exit strategy and culling for clinically sick and infected animals support it. Other strategies adopted include timely sharing of disease information and control experiences, establishing a cross-border prevention and control mechanism with neighbouring countries, enhancing multi-sectoral cooperation, and conducting joint research on diagnosis and integrated control measures.

Laos reported good progress on its pilot vaccination campaign in disease hotspots, which was the first recipient of the small grant facility under the AusAID-funded Stop Transboundary Animal Diseases and Zoonoses (STANDZ) Initiative. The aim is to safeguard the FMD-free status with vaccination of the Upper Mekong FMD control zone, through targeted vaccination and improved communication and public awareness activities.

Malaysia's experiences with unsuccessful strategies in the past led it to develop a new FMD control strategy. This has not only resulted in a huge reduction in the number of outbreaks during the strategy's early years but also provided savings to Malaysia's Veterinary Services. One of the most important conclusions was that trade must be facilitated rather than restricted, and that the participation of the private sector is crucial to FMD control. The SEACFMD Sub-Commission noted the positive impact of enhanced public-private cooperation in Malaysia and encouraged Malaysia, along with China and Thailand, to apply for OIE official recognition of its national FMD control programme.

From left to right: Mr Kong Chuizhu, Governor of Yunnan Province; Mr Gao Hongbin, Vice-Minister of Agriculture of the People's Republic of China; Dr Bernard Vallat, Director General of the OIE; Dr He Lianghui, Mayor of Lijiang

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To enable resource-constrained Members achieve FMD-free status by 2020, the OIE Sub-Regional Representation for South-East Asia will provide technical support to Cambodia, Laos and Myanmar, to help them update their FMD control programmes and achieve the targets identified in the SEACFMD roadmap. SEACFMD Members are also requested to increase their sample submission rate to the OIE FMD reference laboratories in Pakchong, Thailand, and Lanzhou, China.

The meeting identified other priority tasks, such as the in-country implementation of prevention and control activities using the small grant facility of the STANDZ Initiative, which was launched last year, and the vaccine bank. Participants praised the progress of the STANDZ Initiative, and AusAID and the European Union joined national coordinators in expressing their appreciation of the approach taken by the OIE Sub-Regional Representation for South-East Asia in integrating donor-funded programmes into one initiative. The Members also adopted a recommendation on the Sub-Commission's vision for the 'One Health' concept and approved the criteria for the use of vaccine banks for rabies and FMD..

Europe

GF-TADs for Europe: five-year action plan (2012-2016)

The regional branch of the FAO/OIE Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs) for Europe was set up in 2005. It was originally intended to provide a coordinated and effective response to the threat of avian influenza (highly pathogenic avian influenza [HPAI] strain H5N1) affecting several European countries, as well as a multi-stakeholder consultation and coordination platform for defining a longer-term harmonised regional vision and policy for the prevention and control of priority transboundary animal diseases in the region. These diseases include avian influenza (HPAI), foot and mouth disease (FMD), African swine fever (ASF), classical swine fever (CSF), peste des petits ruminants (PPR), rabies and, since 2012, brucellosis, because of its growing epidemiological importance in Central Asia and the Caucasus. Reinforcing Veterinary Services was also selected as a priority theme for action in the region.

The GF-TADs branch for Europe is governed by the Regional Steering Committee of GF-TADs for Europe. It is chaired by the Director for Veterinary and International Affairs at the European Commission and supported by the OIE Sub-Regional Representation in Brussels, which provides the Secretariat.

At its Third Meeting (RSC3, Brussels, February 2010), the Regional Steering Committee asked its Secretariat to work on formulating a multi-annual regional action plan (see Recommendation No. 2 of the RSC3), in response to requests from several Member Countries. There was also a forceful call from the Global Steering Committee, co-chaired by the OIE and FAO, to draw up GF-TADs regional action plans as a basis for drafting the GF-TADs Global Action Plan, based on the identification of priorities common to several regions. GF-TADs Europe was the first to start work on its Action Plan, which could provide a basis for the other four regions.

In 2011, a working group, comprising representatives of the OIE, FAO and the European Commission, and guided by the GF-TADs regional Secretariat, was formed to prepare the regional action plan. To avoid the pitfall of duplication of or competition with the actions of donors and organisations or institutions already operating in the region, it is vital to remember that GF-TADs is a consultation mechanism and was not designed to implement programmes or projects. On the other hand, the strength of the Action Plan should be its ability to take into account countries' demands and needs, expressed at regional animal health meetings. The conclusions and recommendations of the 12 regional meetings held during the 2010–2011 period were studied carefully. Finally, the Action Plan should be coherent, in terms of both objectives and general principles, with the *Basic texts* of GF-TADs (the GF-TADs Agreement of May 2004), the conclusions of the 2009 GF-TADs evaluation and the institutional strategies of the three flagship organisations (the OIE Fifth Strategic Plan, the FAO 'One Health' Action Plan, and the European Commission's new European Union animal health strategy, 'Prevention is better than cure').

The GF-TADs label is proof not only of quality, coherence and relevance, which guarantees that the activity is productive while being a priority for the region, but also of OIE and FAO support, which could facilitate the search for funding, where appropriate.

In this context, the Working Group opted for an innovative process of 'GF-TADs labelling' for activities which meet the following five qualifying criteria:

a) they address one of the seven priority diseases in the European region

b) they contribute to the desired outcomes for each priority disease, as defined in the Action Plan (see below)

c) they are coherent with the existing portfolios of activities in the sub-region and avoid redundancy

d) they have an optimal impact at regional level compared with implementation at national level; and

e) they have been validated by the GF-TADs Europe Committee.

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4th Meeting of the GF-TADs Europe Steering Committee, Brussels, 27 January 2012

The expected outcomes and a list of activities were defined for each disease, which involved holding regional consultations and training meetings and drawing up a portfolio of regional activities for each disease. Of note is the fact that regional activities resulting from a GF-TADs global prevention and control strategy – as is currently the case for FMD (the global strategy for which is presently being drafted) – are labelled automatically. The same applies to GF-TADs labelling of activities underpinning the core activities of GF-TADs Europe, such as Steering Committee meetings or any other activity to support the regional Secretariat. For other activities, it is up to the project leader to submit a request for labelling to the GF-TADs Steering Committee on a purely voluntary basis. The Action Plan is established a posteriori at the end of the year, and includes both the activities that have obtained the GF-TADs label and those of the main participants in the sub-region who contribute to the GF-TADs Europe objectives (such as OIE PVS Pathway activities), and are discussed at the regional platform (Regional Steering Committee Meetings). The effectiveness of GF-TADs will be measured each year, using performance indicators linked chiefly to the epidemiological situation in the region, after establishing the reference situation for each of the indicators selected in 2011.

The GF-TADs Action Plan was presented and discussed at the Fourth Meeting of the GF-TADs Europe Steering Committee, held in Brussels in January 2012. Members will officially validate it in late April, at which point it will become operational.

Appointment of permanent Delegates

14 July 2011

United Arab Emirates

Eng. Abdullah Salem Jannan

Director of Quarantine, Ministry of Environment and Water

1 January 2012

Morocco

Dr Jaouad Berrada

Directeur des Services vétérinaires, Office national de sécurité sanitaire des produits alimentaires (ONSSA), Ministère de l'agriculture et de la pêche maritime

13 January 2012

Ethiopia

Dr Bewket Siraw Adgeh

Director, Animal and Plant Health Regulatory Directorate, Ministry of Agriculture

14 January 2012

Sudan

Dr Alkareem Abdalla Mohammed Awad

OIE Acting Delegate, Acting Undersecretary and Chief Veterinary Officer, Ministry of Livestock, Fisheries and Rangelands

18 January 2012

Portugal

Dr Nuno Vieira e Brito

Director General, Ministry for Agriculture, Sea, Environment and Spatial Planning

24 January 2012

Ecuador

Dr Luis Kilbert Valverde Zuñiga

Director de Agrocalidad, Agencia Ecuatoriana de Aseguramiento de la Calidad del Agro (AGROCALIDAD)

31 January 2012

Croatia

Dr Mirjana Mataušić-Pišl

Assistant to the Minister, Veterinary Directorate, Ministry of Agriculture

7 February 2012

Pakistan

Dr Khurshid Ahmad

Animal Husbandry Commissioner and Principal Scientific Officer, Ministry of National Food Security and Research

14 February 2012

Paraguay

Dr Félix Otazú Leguizamón

Presidente del SENACSA, Dirección General de Comercio Exterior y Relaciones Internacionales (DIGECER), Servicio Nacional de Calidad y Salud Animal (SENACSA)

16 February 2012

Bolivia

Dr Javier Ernesto Suárez Hurtado

Médico Veterinario Zootecnista, Servicio Nacional de Sanidad Agropecuaria e Inocuidad Alimentaria (SENASAG)

24 February 2012

Cuba

Dr Jorge Luis Milián Darias

Director General, Instituto de Medicina Veterinaria, Ministerio de Agricultura

27 February 2012

El Salvador

Dr Héctor David Martínez Arias

Director General de Ganadería, División de Servicios Veterinarios, Ministerio de Agricultura y Ganadería

19 March 2012

Algeria

Dr Ahmed Chawki Karim Boughalem

Directeur des Services vétérinaires, Ministère de l'agriculture et du développement rural

22 March 2012

Russia

Dr Evgeny Nepoklonov

Deputy Head, Federal Service for Veterinary and Phytosanitary Surveillance, Ministry of Agriculture

30 March 2012

Kyrgyzstan

Dr Samatbek T. Aliyev

First Deputy Director and Chief State Veterinary Inspector, State Inspection for Veterinary, Sanitary and Phytosanitary Safety, Ministry of Agriculture and Food

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Processus PVS de l'OIE pour des Services vétérinaires effica

PVS Evaluation missions

State of Play – as at 7 May 2012

OIE Region	OIE Members	Requests received	Missions completed	Reports available for distribution to donors and partners
Africa	52	51	47	36
Americas	29	22	20	17
Asia and the Pacific	32	18	17	11
Europe	53	14	14	12
Middle East	12	12	11	5
Total	178	117	109	81

PVS Evaluation missions (requests)

- **Africa** (51)

Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Rep., Chad, Comoros, Congo, Dem. Rep. of the Congo, Côte d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia (not an OIE Member), Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe.

- **Americas** (22)

Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Rep., Ecuador, El Salvador, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay.

- **Asia-Pacific** (18)

Bangladesh, Bhutan, Brunei, Cambodia, Fiji, Indonesia, Iran, Dem. People's Rep. of Korea, Laos, Maldives, Mongolia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand, Timor Leste, Vietnam.

- **Europe** (14)

Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Georgia, Israel, Kazakhstan, Kyrgyzstan, Romania, Tajikistan, Turkey, Ukraine, Uzbekistan.

- **Middle East** (12)

Afghanistan, Bahrain, Jordan, Kuwait, Lebanon, Oman, Palestinian N.A. (not an OIE Member), Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen.

In red: completed missions

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PVS Gap Analysis missions

State of Play – as at 7 May 2012

OIE Region	OIE Members	Requests received	Missions completed
Africa	52	36	31
Americas	29	11	9
Asia and the Pacific	32	12	9
Europe	53	6	6
Middle East	12	8	3
Total	178	73	58

PVS Gap Analysis missions

- **Africa** (36)
Algeria, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Dem. Rep. of the Congo, Côte d'Ivoire, Djibouti, Egypt, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Madagascar, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Sudan, Tanzania, Togo, Uganda, Zambia.

- **Americas** (11)
Barbados, Belize, Bolivia, Costa Rica, Dominican Republic, El Salvador, Haiti, Honduras, Jamaica, Nicaragua, Panama.

- **Asia-Pacific** (12)
Bhutan, Brunei, Cambodia, Indonesia, Dem. People's Rep. of Korea, Laos, Mongolia, Myanmar, Nepal, Philippines, Sri Lanka, Vietnam.

- **Europe** (6)
Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey.

- **Middle East** (8)
Afghanistan, Kuwait, Lebanon, Oman, Palestinian N.A. (not an OIE Member), Syria, United Arab Emirates, Yemen.

In red: completed missions

Legislation missions

State of Play – as at 7 May 2012

OIE Region	OIE Members	Requests received	Missions completed
Africa	52	21	15
Americas	29	4	3
Asia and the Pacific	32	5	4
Europe	53	3	2
Middle East	12	4	4
Total	178	37	28

This table does not include the missions to Botswana and South Africa nor the first mission carried out in Zambia since the project was in pilot phase

Legislation missions

- **Africa** (21)
Benin, Burkina Faso, Burundi, Cameroon, Dem. Rep. of the Congo, Djibouti, Ethiopia, Gabon, Guinea, Guinea-Bissau, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mauritius, Nigeria, Sudan, Togo, Uganda, Zambia.

- **Americas** (4)
Bolivia, Dominican Rep., Haiti, Honduras.

- **Asia-Pacific** (5)
Bhutan, Cambodia, Laos, Mongolia, Vietnam.

- **Europe** (3)
Armenia, Kazakhstan, Kyrgyzstan.

- **Middle East** (4)
Afghanistan, Kuwait, Lebanon, United Arab Emirates.

In red: completed missions

Regional Seminars for OIE
National Focal Points and new Delegates

Asia – Pacific

OIE Regional Seminar for Recently Appointed OIE Delegates

Tokyo, Japan, 7-8 February 2012

The OIE Regional Representation for Asia and the Pacific organised an OIE Regional Seminar for Recently Appointed OIE Delegates in Tokyo from 7 to 8 February 2012. The one-and-a-half-day seminar was attended by 23 participants, including OIE Delegates from Australia, Iran, the Republic of Korea, Nepal, Timor-Leste and Vietnam, and two proxies from Indonesia and New Zealand.

The seminar opened with welcoming remarks from Dr Alex Thiermann, OIE Technical advisor and President of the Terrestrial Animal Health Code Commission, and Dr Itsuo Shimohira, OIE Regional Representative for Asia and the Pacific, while Dr Toshiro Kawashima, Delegate of Japan to the OIE as well as President of the OIE Regional Commission for Asia, the Far East and Oceania, warmly greeted all delegates on behalf of the host country.

The programme on Day 1 included: general information on the OIE; the rights and obligations of OIE Delegates and Focal Points; the OIE Global Programme of Capacity Building; and the role of the WTO Sanitary and Phytosanitary Agreement in international trade, including OIE standard-setting procedures, official recognition of the status of certain diseases and validation of the FMD control programme. The opportunity was also taken to introduce the activities of the OIE Regional and Sub Regional Representations in Asia and the Regional Commission for Asia and the Far East and Oceania.

Day 2 covered animal health information, the OIE's scientific network and expertise, and the PVS pathway. At the end of the seminar, Dr Thiermann chaired a discussion session so that OIE Delegates could talk about practical approaches towards working with the OIE, both routinely and during the General Session and Regional Conferences.

This was an excellent opportunity for the participants to establish and renew strong networking relationships. Such friendships are of paramount importance in securing better coordination and collaboration among OIE Members and the organisation itself, in the common goal of improving animal health at the global level.

Europe

Seminar for OIE National Focal Points on Wildlife

Pravets, Bulgaria, 23-25 January 2012

The Second Seminar for OIE National Focal Points on Wildlife in Europe was held from 23 to 25 January 2012, in Pravets, Bulgaria. As part of the second cycle of the series of seminars for National Focal Points on Wildlife that was first initiated in 2009, its purpose was to provide an update on the OIE Global Conference on Wildlife, 'Animal health and biodiversity – preparing for the future', that was held in Paris in February 2011 and its subsequent recommendations.

The seminar was hosted by the Bulgarian Food Safety Agency, under the overall responsibility and technical guidance of the OIE Scientific and Technical Department (Dr Elisabeth Erlacher-Vindel) and thanks to successful local organisation by the team of the OIE Regional Representation for Eastern Europe.

The OIE Focal Points on Wildlife from all 53 Member Countries of the OIE Regional Commission for Europe had been invited to attend and a total of 41 countries eventually took their places at the seminar. Belgium, Italy, Sweden and Turkey nominated a second participant as an observer, focusing on the importance of wildlife and wildlife disease reporting in their countries.

The event was opened and chaired by the President of the OIE Regional Commission for Europe and OIE Regional Representative for Eastern Europe, Prof. Dr Nikola Belev. The Director General of the OIE, Dr Bernard Vallat, underlined the important role of the OIE (particularly in terms of standard setting and capacity-building programmes) and of its national counterparts, namely the OIE Delegates and National Focal Points appointed in seven technical topics, including wildlife. Dr Vallat focused on the specificity of the Focal Points on Wildlife since wildlife-related

The three overall objectives of the seminar were to improve:

– national compliance with OIE standards, notably in regards to national legislation

– country participation in the OIE standard-setting process

– disease notification, both in domestic and wild species.

topics have usually been scattered among several ministries.

The President of the International Council for Game and Wildlife Conservation (CIC), Mr Bernard Lozé, gave an address about the fruitful cooperation between the OIE and CIC, following the Agreement signed in May 2011. On behalf of the government of the host country, the Minister of Agriculture and Food, Dr Miroslav Naydenov, welcomed the participants and reported that Bulgaria would sign an agreement with the CIC on 23 January 2012, to establish an international centre for wildlife disease surveillance in Sofia, as a result of the excellent cooperation between his country, the CIC and the OIE over the past few years.

The agenda was organised into lectures and interactive plenary sessions. Interactive sessions were dedicated to demonstrating the WAHIS-Wild application and concrete examples of pathogens and disease reporting. Topics included pathogen prevalence; sample size, test performance, calculation and interpretation; selecting and using diagnostic tests; designing a general surveillance programme, approaches for analysing targeted surveillance data, etc.

Most countries agreed that the issue of wildlife surveillance and notification of wild animal diseases to the OIE is of great importance, not only for their countries but for the whole region, and evaluated the event as having been both successful and useful.

Regional Seminar for OIE National Focal Points on Animal Wel

Kiev, Ukraine, 6-8 March 2012

This seminar formed part of the OIE Regional Representation for Eastern Europe Working Programme for 2011 to 2012 under the OIE Fifth Strategic Plan. It came as an update in the second cycle of seminars for National Focal Points on Animal Welfare, initiated in 2009. The First OIE Seminar for National Focal Points on Animal Welfare was held in Istanbul, Turkey, from 16 to 17 July 2009, and involved all 53 countries in the region.

The Kiev seminar, co-funded by the European Union (EU), was specifically dedicated to non-EU countries, as the 27 EU Member States are far more advanced in terms of animal welfare than the rest of Europe. Out of the 26 National Focal Points on Animal Welfare who were invited to the seminar, 20 countries attended, including 11 Russian-speaking countries. Belgium and Italy also took part.

The agenda was organised into plenary sessions (Days 1 and 2) and group sessions (Day 3), according to language (English/Russian).

Evaluations of the seminar rated its content, structure/format and organisation as very satisfactory. Participants felt that they acquired a good understanding of their role as a National Focal Point on Animal Welfare and of the tasks involved (in-country discussion, commenting on proposed OIE *Terrestrial Code* and *Manual* chapters in support of their Delegate). As always, these seminars are ideal forums for networking and the group sessions offer the opportunity to actively

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participate in discussions and communicate easily with other Focal Points.

East European countries need support to improve their implementation of OIE standards on animal welfare, including updating national regulations and providing for regulatory programmes in this field.

National animal welfare priorities highlighted by the participants included the transport and slaughter of animals and management of dog populations (stray dogs are the most visible indicator of the animal welfare level of a country). The need for education, legislation and awareness was clearly expressed. Fortunately, the OIE PVS Pathway (notably, the 'treatment' phase) is fully relevant and can provide effective assistance in this area.

The dates and objectives of the OIE Global Conference on Animal Welfare (Kuala Lumpur, Malaysia, 6–8 November 2012) were emphasised several times and countries were encouraged to participate.

All information on this seminar is available from the website of the OIE Regional Representation for Europe (www.rr-europe.oie.int). The OIE *Vademecum* is also a great source of information for Delegates and National Focal Points.

From the group sessions emerged the need for:

– a map of the existing information, materials, tools and centres of expertise available in the region

– a regional animal welfare platform, to share experience, knowledge and existing tools, with a view to assisting countries to implement the OIE animal welfare standards. Another key objective of this platform could be to explore the need for a regional strategy and, if necessary, to develop it – using, as a possible model, the Regional Animal Welfare Strategy (RAWS) prepared for Asia. This platform, whose modalities remain to be determined, could begin with a few members (a 'steering group' composed of three to four people designated by the OIE), and then be further extended to regional stakeholders from the public and private sectors, including consumers. The OIE National Focal Points should be fully active on this platform.

meetings and visits

Names and positions of OIE permanent staff who participated in meetings or visits: January to March 2012

OIE Headquarters

General Directorate

Bernard Vallat	Director General
Alex Thiermann	Technical Adviser and President of the OIE Terrestrial Animal Health Standards Commission
Martin Nissen	Legal Adviser
Maria Zampaglione	Head of the Communication Unit
Glaïeul Mamaghani	Deputy Head of the Communication Unit
Julie Strat	Chargée de mission
Monique Eloit	Deputy Director General (Administration, Management, Human Resources and Regional Actions)
Alain Dehove	Coordinator of the World Animal Health and Welfare Fund
Julie Macé	Project Officer – World Animal Health and Welfare Fund
Emily Tagliaro	Project Officer – World Animal Health and Welfare Fund
Alix Weng	Head of the Budget and Financial Unit
Jean-Pierre Croiziers	Head of the Human Resources Unit
Gilles Seigneurin	Head of the Accounts Unit
Marie Bonnerot	Administrative and Budgetary Technician
Romain Lemesnager	Accounts Assistant
Kazuaki Miyagishima	Deputy Director General (Animal Health, Veterinary Public Health and International Standards)

Administration, Logistics and Publications Department

Daniel Chaisemartin	Head of Department
Paul-Pierre Pastoret	Scientific Adviser
Marie Teissier	Documentalist
Bertrand Flahault	1st Deputy Head of Department and Head of the Systems Management and Events Unit
Ingrid Contreras Arias	Conference Coordinator
Annie Souyri	2nd Deputy Head of Department and Head of the Publications Unit
Tamara Benicasa	Marketing and Sales Manager

Animal Health Information Department

Karim Ben Jebara	Head of Department
Manuel J. Sánchez Vázquez	Deputy Head of Department
Marija Popovic	Chargée de mission
Paula Cáceres	Veterinary Epidemiologist
Lina Awada	Veterinary Epidemiologist
Simona Forcella	Chargée de mission
Aziza Yassin Mustafa	Chargée de mission
Vera Cecilia Ferreira de Figueiredo	Chargée de mission

International Trade Department

Sarah Kahn	Head of Department
Gillian Mylrea	Deputy Head of Department
Masatsugu Okita	Chargé de mission
Mariela Varas	Chargée de mission
Victor Saraiva	Chargé de mission

Scientific and Technical Department

Kazuaki Miyagishima	Head of Department
Joseph Domenech	Chargé de mission
Elisabeth Erlacher-Vindel	Deputy Head of Department
Kathleen Glynn	Chargée de mission
Alessandro Ripani	Chargé de mission
Susanne Münstermann	Chargée de mission
Bernardo Todeschini	Chargé de mission
Kiok Hong	Chargé de mission
Raffaella Nisi	Laboratory Specialist
François Diaz	Chargé de mission
Keith Hamilton	Chargé de mission
Laure Weber-Vintzel	Officer in charge of the Recognition of Countries' Animal Disease Status
Jennifer Lasley	Project Coordinator
Gounalan Pavade	OFFLU Technical Assistant
Sara Linnane	Scientific Editor
Marta Martínez Avilés	Veterinary Epidemiologist

Regional Activities Department

François Caya	Head of Department
Nathaly Monsalve	Conference Coordinator/Trilingual Secretary
Mara Elma González	Deputy Head of Department
Francisco D'Alessio	Chargé de mission
Marie Edan	Chargée de mission

OIE Regional and Sub-Regional Representations

Africa

Yacouba Samaké	Regional Representative for Africa (Bamako, Mali)
Florência Cipriano	Deputy Regional Representative for Africa (Bamako, Mali)
Daniel Bourzat	Adviser to the Regional Representative for Africa (Bamako, Mali)
Youma N'Diaye	Accountant (Bamako, Mali)
Mariam Minta	Secretary (Bamako, Mali)
Aïssata Bagayoko	Secretary (Bamako, Mali)
Alou Sangaré	Administrative Assistant (Bamako, Mali)
Neo Joel Mapitse	Sub-Regional Representative for the Countries of the Southern African Development Community (Gaborone, Botswana)
Patrick Bastiaensen	Programme Officer (Gaborone, Botswana)
Mpho Mantsho	Administrative and Financial Assistant (Gaborone, Botswana)
Nomsa Thekiso	Secretary (Gaborone, Botswana)
Rachid Bouguedour	Sub-Regional Representative for North Africa (Tunis, Tunisia)
Vincent Brioudes	Programme Officer (Tunis, Tunisia)
Antonio Petrini	Programme Officer (Tunis, Tunisia)
Mouna Boussleh	Administrative and Financial Assistant (Tunis, Tunisia)
Inès Guitouni	Secretary (Tunis, Tunisia)
Walter Masiga	Sub-Regional Representative for Eastern Africa and the Horn of Africa (Nairobi, Kenya)
Antoine Maillard	Adviser to the Sub-Regional Representative for Eastern Africa and the Horn of Africa (Nairobi, Kenya)
Grace Omwega	Administrative and Financial Assistant (Nairobi, Kenya)
Loise W. Ndungu	Secretary (Nairobi, Kenya)

Americas

Luis Osvaldo Barcos	Regional Representative for the Americas (Buenos Aires, Argentina)
Martín Minassian	Technical Assistant (Buenos Aires, Argentina)
Alicia Palmas	Secretary (Buenos Aires, Argentina)
Leandro Barcos	Administrative Assistant (Buenos Aires, Argentina)
Filiberto Frago Santamaría	Sub-Regional Representative for Central America (Panama City, Panama)
Alina Gutierrez Camacho	Secretary (Panama City, Panama)

Asia and the Pacific

Itsuo Shimohira	Regional Representative for Asia and the Pacific (Tokyo, Japan)
Tomoko Ishibashi	Senior Deputy Regional Representative for Asia and the Pacific (Tokyo, Japan)
Kenji Sakurai	Deputy Regional Representative for Asia and the Pacific (Tokyo, Japan)
Chantanee Buranathai	Regional Technical Assistant (Tokyo, Japan)
Hnin Thidar Myint	Regional Veterinary Officer (Tokyo, Japan)
Noriko Tesaki	Accountant (Tokyo, Japan)
Takako Hasegawa Shimizu	Secretary (Tokyo, Japan)
Kazue Akagawa	Secretary (Tokyo, Japan)
Yuka Fay	Secretary (Tokyo, Japan)
Ronello C. Abila	Sub-Regional Representative for Southeast Asia and SEACFMD Regional Coordinator (Bangkok, Thailand)
Alexandre Bouchot	Project Manager (EU/HPED) and Technical Adviser (SEACFMD) (Bangkok, Thailand)
Andrew Davis	Project Manager (IDENTIFY) (Bangkok, Thailand)
Quyen Tran	Project Officer (HPED) (Bangkok, Thailand)
Dirk Van Aken	STANDZ Programme Coordinator (Bangkok, Thailand)
Mary Joy Gordoncillo	Project Officer (STANDZ) (Bangkok, Thailand)
Maria Cecilia Dy	Coordinator for the 'M&E' initiative (Bangkok, Thailand)
Khun Chutikarn Dhebhasit	Secretary (Bangkok, Thailand)
Patitta Angvanitchakul	Secretary (Bangkok, Thailand)

Eastern Europe

Nikola T. Belev	Regional Representative for Eastern Europe (Sofia, Bulgaria) and President of the OIE Regional Commission for Europe
Stanislav Ralchev	Technical Assistant (Sofia, Bulgaria)
Rina Kostova	Secretary (Sofia, Bulgaria)
Nadège Leboucq	Sub-Regional Representative in Brussels (Belgium)
Jean-Pierre Vermeersch	Project Manager (ADIS) (Brussels, Belgium)

Middle East

Ghazi Yehia	Regional Representative for the Middle East (Beirut, Lebanon)
Mustapha Mestom	Consultant (Beirut, Lebanon)
Rita Rizk	Secretary (Beirut, Lebanon)
Hani Imam	Technical Assistant (Beirut, Lebanon)
Khodr Rjeili	Assistant (Beirut, Lebanon)
Mahmoud Al Ghadaf	Assistant (Beirut, Lebanon)

Names and positions of experts who represented the OIE in meetings or visits

Howard Batho	OIE Expert
Gideon Brückner	President of the OIE Scientific Commission for Animal Diseases
Kris de Clercq	Vice-President of the OIE Scientific Commission for Animal Diseases
Stéphane de La Rocque	OIE Expert
Gardner Murray	OIE Special Adviser
Michel Thibier	OIE Expert

List of abbreviations

ADIS
Animal Disease Information System of the European Union

AI
Avian influenza

APHCA
Animal Production and Health Commission for Asia and the Pacific

AQ
Sub-Committee on Aquaculture

ARC-OVI
Agricultural Research Council–Onderstepoort Veterinary Institute

ASEAN
Association of Southeast Asian Nations

AU-IBAR
African Union–Interafrican Bureau for Animal Resources

AWARE
Animal Welfare Research in an Enlarged Europe (European Commission project)

BBIC
Biosafety and Biosecurity International Conference

CALLISTO
Companion Animals multisectoriaL interprofessionaL and Interdisciplinary Strategic Think tank On zoonoses

COFI
Committee on Fisheries

COPA-COGECA
Committee of Professional Agricultural Organisations–General Confederation of Agricultural Cooperatives

CVP
Standing Veterinary Committee of the Southern Cone

EC
European Commission

EDENext
Biology and control of vector-borne infections in Europe

EFSA
European Food Safety Authority

EISMV
Inter-State School of Veterinary Science and Medicine

EMPRES-i
Global Animal Disease Information System

EPT
Emerging pandemic threats

EU
European Union

FAO
Food and Agriculture Organization of the United Nations

FESASS
European Federation for Animal Health and Sanitary Security

FMD
Foot and mouth disease

FP7
Seventh Framework Programme

FVE
Federation of Veterinarians of Europe

GF-TADs
FAO/OIE Global Framework for the Progressive Control of Transboundary Animal Diseases

GLEWS
Global Early Warning System

GRF
Global Risk Forum

HPAI
Highly pathogenic avian influenza

HPED
European Union-funded cooperation programme on highly pathogenic and emerging and re-emerging diseases in Asia

ICEID
International Conference on Emerging Infectious Diseases

IDENTIFY
Laboratory Capacity-Building and Networking Project

IETS
International Embryo Transfer Society

ILRI
International Livestock Research Institute

IPC
Pasteur Institute of Cambodia

JTF
Japan Trust Fund

LACOMEV
Laboratory for the Control of Veterinary Medicinal Products of EISMV

M&E
Monitoring & Evaluation

NVRI
National Veterinary Research Institute

OFFLU
Joint OIE/FAO worldwide scientific network for the control of animal influenzas

OH-NEXTGEN
Training of the One Health Next Scientific Generation in Sahel and Maghreb

OIE
World Organisation for Animal Health

PANAFTOSA
Pan-American Foot and Mouth Disease Center

PVS
Evaluation of Performance of Veterinary Services

RAHC
Regional Animal Health Center

REEVSM
Network of Veterinary Education Establishments in the Southern Mediterranean

SAARC
South Asian Association for Regional Cooperation

SADC
Southern African Development Community

SAFOSO
Safe Food Solutions

SEACFMD
Southeast Asia and China Foot and Mouth Disease Campaign

SNGTV
National Society of Veterinary Technical Groups

SPINAP-AHI
Support Programme to Integrated National Action Plans for Avian and Human Influenza

SPS
Sanitary and phytosanitary measures

STANDZ
Stop Transboundary Animal Diseases and Zoonoses

STDF
Standards and Trade Development Facility

UK
United Kingdom

US
United States

USAID
United States Agency for International Development

WB
World Bank

WHO
World Health Organization

WTO
World Trade Organization

meetings and visits

January 2012

Title of the event	Place	Date	Participants
Tripartite OIE/FAO/WHO Regional Teleconference	Bangkok (Thailand)	6 January	Dr R.C. Abila, Dr A. Bouchot & Dr M.J. Gordoncillo
38th IETS Annual Conference	Phoenix (United States)	6-11 January	Prof. M. Thibier
OIE FMD Expert Mission to the Andean Countries	Colombia, Ecuador and Peru	9-20 January	Dr L.O. Barcos, Dr G. Brückner, Dr K. de Clercq & Dr H. Batho
WTO STDF Policy Committee Meeting	WTO Headquarters, Geneva (Switzerland)	10 January	Dr G. Mylrea
Informal meeting with COPA-COGECA	Brussels (Belgium)	12 January	Dr N. Leboucq
Meeting with representative from SAFOSO	Paris (France)	13 January	Dr A. Dehove, Dr K. Ben Jebara & Dr E. Erlacher-Vindel
2nd Regional workshop on collaboration between human and animal health sectors on zoonosis prevention and control	Chiang Mai (Thailand)	16-17 January	Dr M. Martínez Avilés, Dr T. Ishibashi, Dr A. Bouchot, Dr A. Davis, Dr M.J. Gordoncillo, Ms P. Angvanitchakul & Dr G. Murray
Consultation on compartmentalisation with Government of Chile	Chile	16-20 January	Dr A. Thiermann
Meetings organised by AU-IBAR: 60th AU-IBAR anniversary, SPINAP-AHI closing and launching of governance programme for Veterinary Services	Nairobi (Kenya)	16-20 January	Dr A. Dehove, Dr Y. Samaké, Dr D. Bourzat & Dr W. Masiga
Bilateral meeting on the project IDENTIFY with the USAID Agreement Officer's Technical Representative	Washington, DC (United States)	17 January	Dr K. Glynn & Dr J. Lasley
14th Meeting of the GF-TADs FMD Working Group	Rome (Italy)	17 January	Dr J. Domenech, Dr B. Todeschini & Dr N. Leboucq
USAID: EPT Programme Quarterly Partners' Meeting	Washington, DC (United States)	18-19 January	Dr K. Glynn & Dr J. Lasley
ASEAN/FAO/OIE/WHO Rabies Workshop	Chiang Mai (Thailand)	19-20 January	Dr M. Martínez Avilés, Dr A. Bouchot, Dr A. Davis, Dr M.J. Gordoncillo, Ms P. Angvanitchakul & Dr G. Murray
International Green Week 2012	Berlin (Germany)	19-29 January	Dr B. Vallat, Ms M. Zampaglione, Mr M. Nissen & Dr S. Münstermann
SPS Discussion Forum	SADC Headquarters, Gaborone (Botswana)	20 January	Dr N.J. Mapitse
1st International Symposium on 'One World, One Medicine: Global Countermeasures against Transboundary Animal Infectious Diseases'	Miyazaki (Japan)	20-21 January	Dr I. Shimohira, Dr C. Buranathai & Dr H. Thidar Myint
1st Laboratory Directors' Meeting and Workshop on Laboratory Networking and Proficiency Testing for Priority Highly Pathogenic and Emerging and Re-Emerging Diseases in SAARC Countries	Dhaka (Bangladesh)	23-24 January	Dr A. Davis
FAO/Wageningen University Technical Consultation Meeting on: 'Assessing the Potential of Insects as Food and Feed in Assuring Food Security'	Rome (Italy)	23-25 January	Dr G. Mylrea

meetings and visits

January 2012 (cont.)

Title of the event	Place	Date	Participants
Regional Training Seminar for OIE National Focal Points for Wildlife	Pravets (Bulgaria)	23-25 January	Dr B. Vallat, Dr E. Erlacher-Vindel, Dr S. Forcella, Prof. Dr N.T. Belev, Dr S. Ralchev, Ms R. Kostova & Dr N. Leboucq
PVS Mission in Angola	Angola	23 January – 8 February	Dr V. Saraiva & Dr F. Frago Santamaría
G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction	Washington, DC (United States)	24-25 January	Dr A. Dehove & Dr K. Hamilton
Prince Mahidol Award Conference 2012: 'Moving towards Universal Health Coverage: Health Financing Matters'	Bangkok (Thailand)	24-28 January	Dr R.C. Abila, Dr D. Van Aken & Dr G. Murray
Technical meeting with the Yamashina Institute for Ornithology for avian influenza surveillance in wild birds	Chiba (Japan)	26 January	Dr K. Sakurai
4th Regional Steering Committee Meeting of GF-TADs for Europe	Brussels (Belgium)	26-27 January	Dr B. Vallat, Dr J. Domenech, Dr F. Caya & Dr N. Leboucq
FAO/WHO/IPC Workshop: 'Control of microbiological and antimicrobial resistance hazards along the poultry chain in Cambodia'	Phnom Penh (Cambodia)	30 January	Dr A. Bouchot
11th Meeting of the Malaysia-Thailand-Myanmar Tri-State Commission for FMD Control	Penang (Malaysia)	30 January – 1 February	Dr R.C. Abila, Dr M.J. Gordoncillo & Ms P. Angvanitchakul
OIE/FAO/WHO – GLEWS Task Force Meeting	OIE Headquarters, Paris (France)	31 January	Dr A. Dehove, Dr D. Chaisemartin, Dr K. Ben Jebara, Dr M. Popovic, Dr S. Forcella & Dr S. de La Rocque
Meeting with representative from US Food and Drug Administration	OIE Headquarters, Paris (France)	31 January	Dr A. Dehove
7th Meeting of the BBIC Steering Committee	Jordan	31 January – 1 February	Dr G. Yehia

February 2012

Title of the event	Place	Date	Participants
FAO/OIE/WHO Tripartite Annual Meeting	OIE Headquarters, Paris (France)	1-2 February	Dr B. Vallat, Dr A. Thiermann, Ms M. Zampaglione, Dr M. Eloit, Dr A. Dehove, Dr K. Miyagishima, Dr D. Chaisemartin, Dr K. Ben Jebara, Dr S. Kahn & Dr F. Caya
Lecture on OIE's activities at the OIE Reference Laboratory for Bovine Babesiosis and Equine Piroplasmosis	Obihiro (Japan)	3 February	Dr K. Sakurai
Regional Short-Term Training on Veterinary Vaccine Assessment	Tokyo (Japan)	6-10 February	Dr T. Ishibashi & Dr H. Thidar Myint

meetings and visits

February 2012 (cont.)

Title of the event	Place	Date	Participants
Regional Seminar (Asia–Pacific) for Recently Appointed OIE Delegates	Tokyo (Japan)	7-8 February	Dr A. Thiermann, Dr M.E. González, Dr I. Shimohira, Dr T. Ishibashi, Dr K. Sakurai, Dr H. Thidar Myint, Ms N. Tesaki, Ms T. Hasegawa Shimizu, Ms K. Akagawa, Ms Y. Fay, Dr R.C. Abila & Dr A. Davis
10th Meeting of the Upper Mekong Working Group on Zoning for FMD and Animal Movement Management	Nay Pyi Taw (Myanmar)	7-9 February	Dr C. Buranathai, Dr R.C. Abila, Dr A. Bouchot, Dr D. Van Aken, Dr M.J. Gordoncillo & Ms M.C. Dy
Presentation of *Docteur Honoris Causa* to Dr Vallat by the University of Liège (Belgium) – Presentation given to the Faculty of Veterinary Medicine of the University of Liège: 'The roles of veterinarians within the framework of the "One Health" concept'	Liège (Belgium)	8 February	Dr B. Vallat & Prof. P.-P. Pastoret
Study visit of the National School of Veterinary Services	OIE Headquarters, Paris (France)	8 February	Ms M. Zampaglione, Dr A. Dehove, Dr S. Forcella, Dr G. Mylrea & Dr F. Caya
CVP Ordinary Meeting	Asunción (Paraguay)	8-9 February	Dr L.O. Barcos
Visit to the General Organization for Veterinary Services and meeting with the new OIE Delegate of Egypt	Cairo (Egypt)	8-9 February	Dr G. Yehia
63rd Plenary Meeting of the EFSA Animal Health and Animal Welfare Panel	Parma (Italy)	9-10 February	Dr N. Leboucq
Monthly Meeting of the Veterinary Services, Ministry of Health of Panama	Panama City (Panama)	10 February	Dr F. Frago Santamaría
FAO meeting: Scientific Development and Technical Challenges in the Progressive Control of FMD in South Asia	New Delhi (India)	13-15 February	Dr J. Domenech, Dr C. Buranathai & Dr R.C. Abila
Preparatory mission for the organisation of the 3rd OIE Global Conference on Animal Welfare, to be held in Kuala Lumpur, Malaysia, from 6 to 8 November 2012	Kuala Lumpur (Malaysia)	13-16 February	Dr D. Chaisemartin
FAO/OIE/WHO Workshop on the four-way linking project for assessing health risks from H5N1 viruses at the human/animal interface	Nha Trang and Hanoi (Vietnam)	13-17 February	Dr A. Davis
Preparatory meeting with the FAO Regional Office for Asia and the Pacific for the organisation of a regional workshop on swine diseases	Bangkok (Thailand)	15 February	Dr K. Sakurai
Meeting with Dr Hoang Van Nam, OIE Delegate of Vietnam, for the organisation of OIE regional activities planned for 2012 in Vietnam	Hanoi (Vietnam)	16 February	Dr K. Sakurai & Dr H. Thidar Myint
EC Animal Health Advisory Committee – Working Group of the Advisory Group on the Food Chain, Animal Health and Plant Health	Brussels (Belgium)	17 February	Dr A. Dehove & Dr N. Leboucq
Implementation of AI surveillance programme on wild and domestic birds in Vietnam (South) in 2012, under the OIE/JTF Project for strengthening HPAI control in Asia	Dong Thap province (Vietnam)	17-23 February	Dr K. Sakurai & Dr H. Thidar Myint
Workshop on Major Zoonotic Diseases of Global Importance (UK–China) and visits to OIE-affiliated Chinese Research and Diagnostic Institutes	Harbin, Changchun and Beijing (People's Republic of China)	18-22 February	Dr K. Hamilton

meetings and visits

February 2012 (cont.)

Title of the event	Place	Date	Participants
GRF 'One Health' Summit 2012: 'One Health – One Planet – One Future: Risks and Opportunities'	Davos (Switzerland)	19-22 February	Dr B. Vallat, Dr K. Glynn & Ms T. Benicasa
Thailand Government Multisectoral Training-of-Trainers Workshop to strengthen the 'One Health' Epidemiological Teams at the Provincial and District Level	Bangkok (Thailand)	20 February	Dr A. Davis
6th Session of the *ad hoc* Codex Intergovernmental Task Force on Animal Feeding	Bern (Switzerland)	20-24 February	Dr G. Mylrea
15th Meeting of the GF-TADs FMD Working Group	OIE Headquarters, Paris (France)	21-22 February	Dr J. Domenech, Dr B. Todeschini & Dr N. Leboucq
USAID EPT+ Programme Inception Workshop	Bangkok (Thailand)	23-24 February	Dr A. Davis
OIE Expert Surveillance Panel on Equine Influenza Vaccine Composition	OIE Headquarters, Paris (France)	27 February	Dr K. Hamilton & Dr G. Pavade
Meeting on the AWARE Project of the European Commission	Brussels (Belgium)	28 February	Dr N. Leboucq
OIE Council	OIE Headquarters, Paris (France)	28 February – 1 March	Dr B. Vallat, Ms M. Zampaglione, Dr M. Eloit, Ms A. Weng, Dr K. Miyagishima & Dr S. Kahn
Laboratory training course to improve control and prevention of rabies in North Africa	Padua (Italy)	28 February – 1 March	Dr A. Petrini
Technical Consultation on the development of the OIE PVS Pathway Mission and Tool for Veterinary Laboratories	OIE Headquarters, Paris (France)	28 February – 1 March	Dr K. Glynn, Dr J. Lasley & Dr A. Davis
International conference on the EU animal welfare strategy (2012–2015): 'Empowering consumers and creating market opportunities for animal welfare'	Brussels (Belgium)	29 February – 1 March	Dr A. Thiermann & Dr N. Leboucq

March 2012

Title of the event	Place	Date	Participants
1st FAO Global Multi-Stakeholder Forum on Animal Welfare	Brussels (Belgium)	1-2 March	Dr A. Thiermann & Dr N. Leboucq
Meeting with the Pan-American Foot and Mouth Disease Center (PANAFTOSA)	Rio de Janeiro (Brazil)	1-2 March	Dr L.O. Barcos
Workshop on Progressive Control of FMD in Eastern Africa	Nairobi (Kenya)	5-6 March	Dr J. Domenech
18th Meeting of the OIE Sub-Commission for SEACFMD Campaign	Lijiang (People's Republic of China)	5-9 March	Dr B. Vallat, Dr A. Dehove, Dr J. Domenech, Dr I. Shimohira, Dr C. Buranathai, Dr R.C. Abila, Dr A. Bouchot, Dr A. Davis, Dr Q. Tran, Dr D. Van Aken, Dr M.J. Gordoncillo, Ms M.C. Dy, Ms K.C. Dhebhasit, Ms P. Angvanitchakul & Dr G. Murray

meetings and visits

March 2012 (cont.)

Title of the event	Place	Date	Participants
Official visit to the new OIE Delegate of Nicaragua	Managua (Nicaragua)	5-9 March	Dr F. Frago Santamaría
Technical meeting with the Department of Livestock on avian influenza surveillance	Vientiane (Laos)	6 March	Dr K. Sakurai & Dr H. Thidar Myint
Regional Training Seminar for OIE National Focal Points for Animal Welfare	Kiev (Ukraine)	6-8 March	Dr M. Eloit, Prof. Dr N.T. Belev, Ms R. Kostova & Dr N. Leboucq
17th Coordination Meeting of the Regional Animal Health Center (RAHC) for Southern Africa	Gaborone (Botswana)	7 March	Dr N.J. Mapitse, Dr P. Bastiaensen, Ms M. Mantsho & Ms N. Thekiso
Review Meeting of Regional Short-Term Training on Veterinary Vaccine Assessment	Tokyo (Japan)	8 March	Dr T. Ishibashi & Dr H. Thidar Myint
FAO-APHCA Strategy Workshop	Bangkok (Thailand)	8-9 March	Dr K. Sakurai
Global Peste des Petits Ruminants Research Alliance Meeting	London (United Kingdom)	9 March	Dr J. Domenech
International Conference on Emerging Infectious Diseases (ICEID 2012)	Atlanta (United States)	11-14 March	Dr K. Glynn
2nd Brainstorming Round Table about the future of the Global Partnership	Boston (United States)	12 March	Dr K. Hamilton
ILRI/WB High-Level Consultation on Global Livestock Agenda to 2020	ILRI Headquarters, Nairobi (Kenya)	12-13 March	Dr B. Vallat & Dr W. Masiga
Visit & tour of Animal Health Information Department staff to FAO-EMPRES-i unit	FAO Headquarters, Rome (Italy)	12-13 March	Dr M. Popovic & Dr S. Forcella
Organisational meeting of the Middle East Conference on Glanders	Dubai (United Arab Emirates)	12-14 March	Dr D. Chaisemartin & Dr G. Yehia
Brainstorming meeting to consider the facilitation of safe transport of horses participating in events	OIE Headquarters, Paris (France)	12-14 March	Dr L.O. Barcos
Regional Technical Livestock and Pastoralism Coordination Meeting	Nairobi (Kenya)	13 March	Dr A. Maillard
2nd Meeting on the EC/FVE CALLISTO Project	Brussels (Belgium)	13 March	Dr N. Leboucq
Global Partnership Meeting and Biosecurity Working Group	Boston (United States)	13-15 March	Dr A. Dehove & Dr K. Hamilton
Conference on 'Combating Antimicrobial Resistance – Time for Joint Action'	Copenhagen (Denmark)	14-15 March	Dr E. Erlacher-Vindel
Meetings with the Department of Animal Health for the organisation of regional activities planned for 2012 in Vietnam	Hanoi and Ho Chi Minh City (Vietnam)	14-15 March	Dr K. Sakurai
3rd International Meeting on Animal Health and Food Safety and 1st Meeting of the REEVSM Executive Committee	Cordoba (Spain)	14-16 March	Dr B. Vallat, Dr A. Thiermann & Dr V. Brioudes
FESASS meeting on Schmallenberg virus	Brussels (Belgium)	15 March	Dr N. Leboucq
Annual Global Disease Detection Meeting, US Centers for Disease Control and Prevention	Atlanta (United States)	15-16 March	Dr K. Glynn

meetings and visits

March 2012 (cont.)

Title of the event	Place	Date	Participants
Building International Capacity for Biological Security in Animal Health Systems – A US Interagency Round Table	Washington, DC (United States)	16 March	Dr A. Dehove
Meeting with Steve Sloan and Joris Vandeputte	OIE Headquarters, Paris (France)	19 March	Dr A. Dehove
Closing workshop of the twinning agreement for rabies between NVRI (Nigeria) and ARC-OVI (South Africa) laboratories	NVRI Headquarters, Vom (Nigeria)	19-20 March	Dr N.J. Mapitse
Curriculum Development Workshop within the framework of OH-NEXTGEN and FP7 project	Rabat (Morocco)	19-21 March	Dr A. Petrini
Visit by a delegation from Kazakhstan	OIE Headquarters, Paris (France)	20 March	Dr B. Vallat, Dr A. Thiermann, Dr M. Eloit, Dr A. Dehove, Ms J. Macé, Ms E. Tagliaro, Dr K. Miyagishima, Dr A. Ripani, Dr K. Hong, Dr K. Hamilton, Dr M.J. Sánchez Vázquez, Dr S. Kahn, Dr M. Okita, Dr M. Varas & Dr M.E. González
Meeting of the Executive Board of the OIE Regional Commission for the Americas	Panama City (Panama)	20-21 March	Dr L.O. Barcos & Dr F. Frago Santamaría
16th Meeting of the GF-TADs FMD Working Group	Rome (Italy)	20-21 March	Dr J. Domenech, Dr B. Todeschini & Dr N. Leboucq
Regional Training Seminar (Africa) for OIE National Focal Points for Veterinary Products	Mombasa (Kenya)	20-22 March	Dr E. Erlacher-Vindel, Dr S. Münstermann, Dr Y. Samaké, Dr W. Masiga & Dr A. Maillard
Regional Training Seminar for OIE National Focal Points for Aquatic Animals	Accra (Ghana)	20-22 March	Dr G. Mylrea, Dr F. Cipriano, Dr D. Bourzat, Ms M. Minta & Mr A. Sangaré
National Animal Health Laboratory Strategic Planning Workshop, under the IDENTIFY programme	Melbourne (Australia)	20-24 March	Dr A. Davis & Ms P. Angvanitchakul
G8 Global Partnership Meeting	Paris (France)	22 March	Dr A. Dehove
ADIS Project – Meeting with the European Commission	Brussels (Belgium)	26 March	Dr D. Chaisemartin, Dr A. Dehove & Ms E. Tagliaro
53rd Meeting of the WTO SPS Committee followed by three informal meetings	Geneva (Switzerland)	26-28 March	Dr M. Okita
6th Session of the FAO-COFI-AQ	Cape Town (South Africa)	26-30 March	Dr N.J. Mapitse
Monitoring & Evaluation Workshop for the OIE Sub-Regional Representation for Southeast Asia	Bangkok (Thailand)	26-30 March	Dr R.C. Abila, Dr A. Bouchot, Dr A. Davis, Dr Q. Tran, Dr D. Van Aken, Dr M.J. Gordoncillo & Ms M.C. Dy
32nd FAO Regional Conference	Buenos Aires (Argentina)	26-30 March	Dr L.O. Barcos & Dr M. Minassian
Closing meeting of the twinning with LACOMEV	Fougères (France)	27 March	Dr S. Münstermann
6th Technical Meeting on AI Surveillance Programme, under the OIE/JTF Project for Strengthening HPAI Control in Asia	Tokyo (Japan)	27 March	Dr I. Shimohira, Dr K. Sakurai & Dr H. Thidar Myint
OFFLU Swine Influenza Virus Meeting	OIE Headquarters, Paris (France)	27-28 March	Dr K. Hamilton & Dr G. Pavade

meetings and visits

March 2012 (cont.)

Title of the event	Place	Date	Participants
EDENext Annual General Meeting	Izmir (Turkey)	27-29 March	Dr K. Glynn
153rd Meeting of the Japanese Society of Veterinary Science	Saitama (Japan)	27-29 March	Dr T. Ishibashi
West Eurasia FMD Roadmap Meeting	Istanbul (Turkey)	27-29 March	Dr J. Domenech, Dr N. Leboucq & Dr G. Yehia
Visit at the invitation of the Mexican Authorities	Mexico City (Mexico)	27-30 March	Dr B. Vallat
Meeting with the Belgian Authorities (Headquarters Agreement)	Brussels (Belgium)	28 March	Dr M. Eloit
Western Balkans EC Project – Transboundary Epidemiology Training and Workshop	Zagreb (Croatia)	28-30 March	Dr M. Popovic
SNGTV General Assembly	OIE Headquarters, Paris (France)	29 March	Dr M. Eloit
WTO STDF Working Group Meeting	Geneva (Switzerland)	29-30 March	Dr M. Okita
All Ireland State Veterinarians Scientific Conference 2012	Dublin (Ireland)	30 March – 1 April	Dr M. Eloit

epidemiology & animal disease control programmes

White spot disease in Africa: experiences and lessons learned

The devastating impact that diseases have had on shrimp farming in Asia and the Americas during the past 20 years has been well documented. Considered the most virulent is white spot disease (WSD), which is estimated to have cost the world's shrimp farming industry nearly ten billion dollars in lost production.

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Shrimp infected with white spot disease
(photo: courtesy of the Association of Shrimp Producers of Mozambique)

Diseased shrimp show typical clinical – though not pathognomonic – signs, such as a dark-reddish coloration of the whole body, white inclusions (spots) on the carapace and appendages, and lethargic behaviour with a loss of appetite. The causative agent of WSD, white spot syndrome virus (WSSV), is an ovoid-shaped, large, enveloped, non-occluded, double-stranded DNA virus, belonging to the *Whispovirus* genus within the *Nimaviridae* family, which first emerged in North-east Asia in 1992 to 1993. It is the largest animal DNA virus found to date, with 180 open reading frames (ORFs) within the 360 kilobase pairs (kbp) of the genome. It has a very wide host range in that, so far, no decapod crustacean (of the order Decapoda), including penaeid prawns, crabs, crayfish and lobsters from marine, brackish or freshwater sources, has been reported to be resistant and annelids, arthropods or molluscs can all be vectors. It also has a wide geographical distribution, being present on almost all continents. Many cell types are targeted by the virus, including the cuticular epithelium and some connective tissues, and severe damage is caused to the stomach, gills, antennal gland, heart and eyes.

White spot disease is usually highly lethal, with cumulative mortality in farmed shrimp reaching 100% within two to seven days of infection, once a pond has been affected. Transmission routes of WSSV are vertical (trans-ovum), horizontal by *per os* consumption of infected tissue, and it can be water borne (the resistance of the free virus in sea water in open ponds is 3-4 days).

Until recently, Africa was one of the last tropical places on earth that remained free from this virulent infection, despite the existence of a growing shrimp industry for more than 20 years. Unfortunately, the first occurrence in Africa has now been detected, on a shrimp farm in Quelimane, Zambezia Province, Mozambique, on 31 August 2011. White spot disease was confirmed by the OIE Reference Laboratory at the University of Arizona on 14 September and the outbreak was officially reported to OIE Headquarters by the Mozambique Competent Authorities on 22 September. Other shrimp aquaculture sites also tested positive for the presence of WSSV in late 2011. As a consequence, all affected production units had to be depopulated, dried out and disinfected, resulting in a huge economic loss and considerable unemployment.

In parallel with the stamping-out exercise, an initial epidemiological survey was rapidly performed, with contributions from both public and private stakeholders, to evaluate the distribution of WSSV along the Mozambican coast. First results showed that this virus was already widespread in almost all coastal provinces of Mozambique, affecting several crustacean species, including penaeid shrimp and crabs, which strongly suggested that WSD had already been present in these waters for several months or even years. This experience demonstrates the importance of developing a national strategy for aquatic animal health and implementing a functional general surveillance programme before the first occurrence of an aquatic animal disease, if countries are to be prepared for disease prevention, early detection and an adequate emergency response when disease occurs.

Given the experiences of other countries where WSD has become endemic, it is obvious that the shrimp farming methods used in Africa now need to become adapted to this new animal health situation, by increasing biosecurity levels in rearing facilities, controlling the movement of all susceptible animals and identifying all possible entries of the virus. Working with biosecure and pre-certified WSSV-free compartments and quarantined wild broodstock tested by polymerase chain reaction (or, even better, domesticated specific pathogen-free shrimp) is the only reliable way known thus far to continue to produce shrimp in WSSV-infected zones. This will require a huge financial effort from the African shrimp industry, alongside strong involvement and careful supervision by the Competent Authorities, supported by the National Focal Points of Mozambique and surrounding countries.

Dead shrimp

(photo: courtesy of the Association of Shrimp Producers of Mozambique)

Incinerating infected shrimp

(photos: courtesy of the National Institute for Fish Inspection)

OIE Expert surveillance panel on equine influenza vaccine composition

OIE Headquarters, Paris, 27 February 2012

Conclusions and Recommendations

Influenza activity in 2011

During 2011, outbreaks/cases of equine influenza were reported by France, Germany, Ireland, Mongolia, Sweden, United Kingdom (UK), and United States of America (USA).

Sources of viruses characterised during 2011

Equine influenza A (H3N8) viruses were isolated and/or characterised from outbreaks in France, Germany, Ireland, the UK and the USA.

Field data

Equine influenza virus infections were confirmed in vaccinated and unvaccinated horses. Vaccination breakdowns were observed in training yards in France and Germany and in an equestrian centre in Germany. The viruses identified belonged to clade 2 of the Florida sublineage. Horses regularly vaccinated with different vaccines, including vaccines updated according to the 2004 recommendations to incorporate an A/eq/South Africa/04/2003-like virus, were affected. These vaccines had not been updated in accordance with the recommendations of 2010 and 2011, to include a virus from clade 2 for optimum protection.

A clade 1 virus of the Florida sublineage was isolated from a regularly vaccinated horse at the Belmont training track in New York.

Fatalities associated with influenza infection were reported in France and Mongolia.

Characterisation of viruses isolated in 2011

Viruses isolated/identified in 2011 from four outbreaks in France, two outbreaks in Germany, two outbreaks in Ireland, seven outbreaks in the UK and three in the USA were characterised genetically by sequencing of the haemagglutinin (HA) gene. Viruses isolated in the UK and in the USA were also characterised antigenically by haemagglutination inhibition (HI) assay using post-infection ferret antisera.

Genetic characterisation

All HA1 sequences obtained from viruses were of the American lineage (Florida sublineage). The viruses identified in France, Germany, Ireland and the UK were characterised as clade 2 viruses. The viruses identified in the USA were characterised as clade 1 viruses. New HA amino acid substitutions were seen in viruses of both sublineages compared with isolates from 2010, further increasing the sequence divergence between the sublineages.

Conclusions and Recommendations

Antigenic characteristics

HI data and antigenic cartography analysis of HI data available for viruses isolated in 2011 indicate that the two clades of the Florida sublineage continue to evolve.

Conclusions

No Eurasian viruses were isolated in 2011. The majority of the viruses isolated and characterised were from the American clade 2 lineage (Florida sublineage). Only viruses isolated in the USA fell within clade 1. There was evidence of a lack of vaccine efficacy, particularly against clade 2 viruses.

Level of surveillance and updating of vaccines

The panel continues to emphasise the importance of increased surveillance and investigation of vaccination breakdown in different countries. Rapid submission of viruses to reference laboratories is essential if antigenic and genetic drift is to be monitored effectively on a global basis.

Vaccines should contain epidemiologically relevant viruses.

The updating of vaccines in a timely manner is necessary for optimum protection.

Recommendations

It is not necessary to include an H7N7 virus or an H3N8 virus of the Eurasian lineage in vaccines as these viruses have not been detected in the course of recent surveillance and are therefore presumed not to be circulating.

Vaccines for the international market should contain both clade 1 and clade 2 viruses of the Florida sublineage.

Clade 1 is represented by A/eq/South Africa/04/2003-like or A/eq/Ohio/2003-like viruses.

Clade 2 is represented by A/eq/Richmond/1/2007-like viruses.

A panel of viruses covering both clades is available from the OIE Reference Laboratories.

Manufacturers producing vaccines for a strictly national market are encouraged to liaise with Reference Laboratories. This will ensure utilisation of reference reagents in the selection of viruses for inclusion in vaccines that induce cross-reactive responses that are immunogenically relevant to the equine influenza viruses circulating nationally.

Reference reagents

Freeze-dried post-infection equine antisera to A/eq/Newmarket/1/93 (American lineage H3N8) and A/eq/South Africa/4/2003 (Florida clade 1, sublineage of the American lineage) are available from the European Directorate for the Quality of Medicines (EDQM). These sera have been assigned Single Radial Haemolysis values through an international collaborative study and can be used as primary reference sera for the assay.

activities of reference laboratories & collaborating centres

Annual reports of Reference Laboratory/ Collaborating Centre activities for 2011

Reports have been received from 176 out of 182 Reference Laboratories and from 37 out of 38 Collaborating Centres for terrestrial animal diseases or topics. The OIE has decided to discontinue routine distribution of the CD-ROM and to keep the annual reports available on line.

The international activities relevant to the work of the OIE are summarised in the tables below. Reports are also being received from the 43 Reference Laboratories and two Collaborating Centres for aquatic animal diseases or topics. They will shortly be available on line.

Reference Laboratories

Activities		Percentage of Laboratories carrying out these activities
General activities		
1	Test(s) in use/or available for the specified disease	97%
2	Production, testing and distribution of diagnostic reagents	92%
Specific OIE activities		
3	International harmonisation/standardisation of methods	
	a. Networking with OIE laboratories	51%
	b. Proficiency testing with laboratories other than OIE ones	62%
4	Preparation and supply of international reference standards	71%
5	Research and development of new procedures	88%
6	Collection, analysis and dissemination of epizootiological data	73%
7	Maintenance of quality assurance, biosafety and biosecurity	88%
8	Provision of consultant expertise	86%
9	Provision of scientific and technical training	72%
10	Provision of diagnostic testing facilities	64%
11	Organisation of international scientific meetings	36%
12	Participation in international scientific collaborative studies	58%
13	Presentations and publications	84%

Collaborating Centres

Activities		Percentage of Collaborating Centres carrying out these activities
1	Activities as a centre of research, expertise, standardisation and dissemination of techniques	94%
2	Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the surveillance and control of animal diseases, food safety or animal welfare	72%
3	Networking: maintenance of a network with other OIE Collaborating Centres designated for the same specialty and/or of a network with Centres in other disciplines	90%
4	Placement of expert consultants at the disposal of the OIE	87%
5	Provision of scientific and technical training to personnel from OIE Member Countries	90%
6	Organisation of scientific meetings on behalf of the OIE	46%
7	Coordination of scientific and technical studies in collaboration with other laboratories or organisations	65%
8	Publication and dissemination of information that may be useful to OIE Member Countries	90%

Self-declaration

Other than for foot and mouth disease, contagious bovine pleuropneumonia and bovine spongiform encephalopathy, for which the OIE has currently a procedure of official recognition of status, the self-declaration of freedom of a country or a territory from a given OIE-listed disease is under the responsibility of the Member concerned. The OIE is not responsible for inaccuracies in the publication of self-declarations concerning the status of a country or zone with regard to a disease.

Self-declaration from Kuwait on the recovery of its glanders-free status

Self-declaration submitted to the OIE on 11 March 2012 by Ms Nabilah Ali Al-Khalil, Deputy Director General Animal Wealth, Public Authority for Agricultural Affairs and Fish Resources, Safat, State of Kuwait

Background information

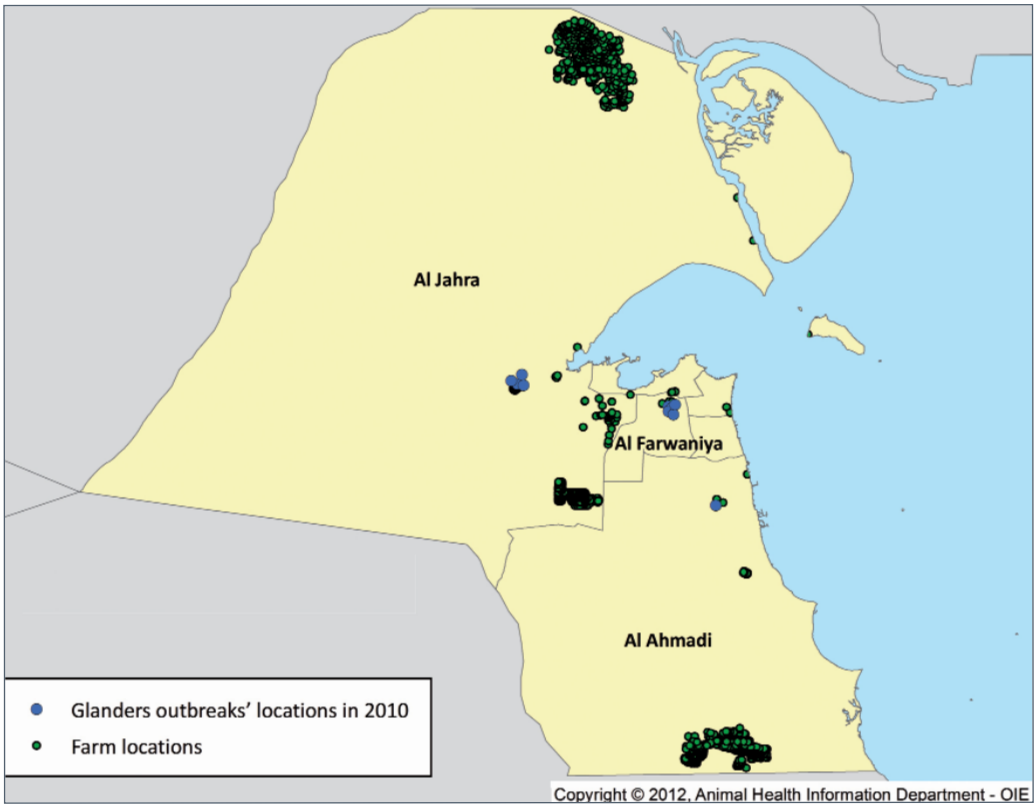
Glanders is a notifiable disease in the State of Kuwait and the Veterinary Authorities reported its existence in their annual reports for 2009 and 2010, available to the World Animal Health Information Database (WAHID).

After the declaration of the occurrence of glanders in 2010, in the Kingdom of Bahrain, and the identification of two horses that tested positive for glanders, and were claimed to have been imported from Kuwait, the Public Authority for Agricultural Affairs and Fish Resources (PAAAFR) initiated a surveillance programme for glanders in Kuwait, by implementing an active surveillance programme on all equine populations in Kuwait.

Most horses in Kuwait were microchipped and tested. From April 2010 until last year (an OIE glanders mission visit took place in November 2011), 4,158 horses (98.5% of the horse population in Kuwait) were serologically tested for glanders by complement fixation test (CFT). Another 42 horses (1.5%) have since been tested. More than 690 samples were analysed in parallel with the OIE Reference laboratory of the Friedrich-Loeffler-Institute, Jena, Germany, where CFT and Immunoblot assay were performed. During this study, seven animals were culled because of positive serological results by CFT and two animals died.

The approved CFT test was conducted during the surveillance programme, in accordance with the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals*, and those horses that tested positive were culled, according to the CFT results obtained from the OIE Reference Laboratory, Jena, and the National Veterinary Laboratory, Kuwait, and as per the 1964 legislation.

Between 2010 and 2011, PAAF invited two OIE expert missions to evaluate the survey procedures. During these visits, the expert missions provided the latest diagnostic procedures and information about the disease to the authorities, the staff working at the National Laboratory, the staff from racing stables



responsible for horse care and those from equestrian clubs, as well as people working at quarantine stations and border posts. The expert missions also evaluated the diagnostic performance of the PAAF National Laboratory and the management of the disease by the authorities, especially the handling of positive cases and efforts to prevent further cases.

Implementation by the Kuwaiti Veterinary Services of the recommendations of the OIE experts

The Veterinary Services of Kuwait strictly implemented the recommendations of the OIE experts, especially in regard to:

Animal health

– The surveillance programme will continue for the next three years and beyond. All new equidae will be identified and officially registered.

– During the surveillance programme, rigorous controls on the movement of equines across borders and within the country are strictly respected.

– All animals testing positive are culled after the first positive CFT result, according to the OIE *Terrestrial Animal Health Code* and national law 10/1964.

– Collaboration with the OIE Reference Laboratories at the Friedrich-Loeffler-Institute, Jena, Germany, and the Central Veterinary Research Laboratory in Dubai, United Arab Emirates, will continue, especially in regard to cross-checks of testing and quality control.

– During the surveillance programme, the processing of data and samples is fully in the hands of the PAAF.

– Since camels are also susceptible to glanders, after a risk assessment, this species will also be included in the surveillance programme.

Laboratory diagnosis

– The National Laboratory has the capacity to perform all investigations, and will use all adapted kits to the current best standards.

– An experienced bacteriologist, with experience in CFT, and his technical team, were involved in the surveillance programme. Test procedures and interpretation of the results were conducted in accordance with the CFT kit manufacturer's instructions.

– The laboratory will aim at accreditation to improve the reliability of its results. This will aid the clear documentation of results and the implementation of a training programme for technicians and responsible officers.

Regulations and quarantine measures

– Glanders is a notifiable disease. All government and private veterinarians are required to notify any suspect cases of equines infected with glanders to the PAAF (as mandated by PAAF legislation, No. 10, 1964, article 2).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– All equines imported into the State of Kuwait should be accompanied by a health certificate, stating that the animals have tested negative for glanders, as indicated by a certified report from a Reference Laboratory using CFT (according to OIE requirements).
– All equines imported into Kuwait or exported from Kuwait are subject to serological testing for glanders at the National Laboratory and at the OIE Reference Laboratory in Dubai.
– All equines departing from Kuwait for horse competitions abroad are subject to mandatory testing for glanders. If the animals have been abroad for more than 21 days, they are tested again upon their arrival back into Kuwait.

Animal disposal and disinfection

– Animals testing positive for glanders are humanly euthanized, using T61 lethal injection.
– Animals are disposed of by deep burial in dry soil.
– Bedding and faecal materials are incinerated. Housing premises, utensils, and transporting vehicles are thoroughly cleaned then disinfected.
– All equines on the affected premises are placed under restrictions and serologically tested for glanders.

Public health awareness

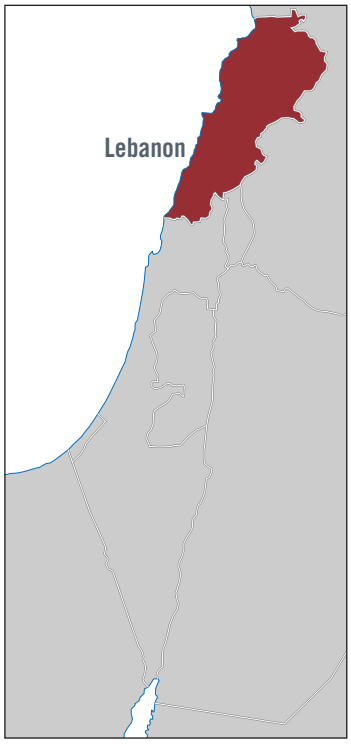
– Notification to the public health authorities is continually carried out through the Committee of Zoonotic Diseases, a joint committee between the PAAF and Ministry of Health.
– The risk of glanders as a zoonotic disease is explained to horse owners and to all personnel (attendants, farriers, etc.) working on horse farms. Horse attendants are trained to recognise the early signs of infection, to notify the appropriate authorities, and to undertake measures to prevent human infection.
– Public lectures, presentations and flyers are used to raise awareness of the disease among veterinarians, horse owners and the public.

Disease outbreak history

Twenty-two cases of glanders were reported in horses in 2009 and these animals were culled. In 2010, ten outbreaks of glanders were identified, with 11 cases, three deaths and eight horses culled. The last two confirmed cases (one horse died and the other was culled) were dated 19 December 2010. All animals testing positive were stamped out, with all accompanying recommended hygiene procedures.

Since that date, more than six months have elapsed, with no further positive cases identified and no clinical signs of glanders appearing in horses in Kuwait, in compliance with Article 12.10.2. of of the *Terrestrial Animal Health Code* chapter on glanders (www.oie.int/index.php?id=169&L=0&htmfile=chapitre_1.12.10.htm). Thus, the Delegate of the State of Kuwait, declares that her country, while continuing its long-term surveillance programme on glanders, has regained freedom from glanders.

Self-declaration from Lebanon on its glanders-free status



Self-declaration submitted to the OIE on 23 March 2012 by Dr Nabih Ghaouche, Director of Animal Resources, Ministry of Agriculture, Beirut, Lebanon

Background information

Glanders is a notifiable disease in Lebanon and its Veterinary Services (VS) regularly report the situation to the OIE through WAHIS six-monthly reports.

In March 2011, two horses were suspected of being infected by glanders, having been in contact with four other horses from a neighbouring country, which showed obvious clinical signs.

The suspected horses (Manhal and Symbol) were put into quarantine and their blood sampled. These samples (among others, including all the horses from the index stables and from neighbouring stables) were sent to the OIE Reference Laboratory, the Friedrich-Loeffler-Institut (FLI), in Jena, Germany.

The sera of these two tested positive by complement fixation test (CFT) and Western blot (WB), as did sera from 10 other horses. Both horses developed clinical signs.

A strategic plan for the surveillance of glanders in equidae was set in force by the Minister of Agriculture in May 2011. Up until now, all horses in Lebanon have been microchipped and tested when registered; donkeys and mules are included in the survey but not microchipped.

According to official statistics, in 2010, the population of equidae in Lebanon was 2,278.

– From April 2011, up to the date of this report (23 March 2012), 1,776 horses (almost the entire horse population in Lebanon) were serologically tested for glanders by CFT (Germany and Fanar). Some were retested by Mallein test.

– Approximately 500 mules and donkeys, the population in Lebanon, distributed through the rural area with livestock, were randomly tested.

More than 750 samples were analysed at the OIE Reference Laboratory, theFLI in Jena, Germany, where CFT and WB were performed. During this study, 30 animals were culled because of positive serological results and one animal died.

During the surveillance programme, the VS in Lebanon identified a farm in the Bekaa Valley, to which horses had been transported from Syria and sold, as the only source of transmission of the disease from the infected Syrian horses.

Accordingly the VS have closed this farm and carried out cleaning and disinfection

The Ministry of Agriculture invited an OIE mission, including experts from the OIE Reference Laboratory in Jena, to evaluate the success of the survey. During the visit, the expert group shared information about the disease and the latest knowledge in diagnostic procedures. Furthermore, it evaluated the diagnostic performance of the National Laboratory, the management of the outbreak by authorities, especially the handling of the positive cases, and the measures undertaken to avoid further cases of the disease.

The surveillance programme implemented by the VS in Lebanon for the entire equine population took into consideration the recommendations of the expert mission:

Animal health

– All horses in Lebanon are microchipped and DNA tested.

– All horses are registered at the Ministry of Agriculture, including those registered with the race-track administration and the Lebanese Equestrian Federation.

– The surveillance programme will continue for a certain time period after the declaration. All equidae must be reported to the authorities by the owners and surveyed at least twice a year.

– Stamping-out policy is implemented according to the OIE *Terrestrial Animal Health Code* and surveillance strategy.

– Strict control on the movement of equines at borders and within the country is rigorously enforced (decision number 1107/1 – organisation of import of equidae to Lebanon, circular 211/6 dated 12/04/2011 – restriction on movement of horses inside Lebanon and at borders).

– In all decisions, the status of glanders as a zoonosis is considered and collaboration takes place with the public health authorities.

– Awareness of the disease is raised, and workshops and seminars are provided as well, to educate veterinarians and horse owners.

Laboratory

– The National Laboratory has the capacity to undertake all investigations. The applied diagnostic CFT antigen has been adapted, according to the current available scientific knowledge.

– The Department of Bacteriology at the National Laboratory of Al Fanar is aiming at accreditation to improve the reliability of its results. This will aid the clear documentation of results, and a training programme will be implemented for technicians and responsible staff.

– Collaboration with the OIE Reference Laboratories, FLI, in Jena, and the Central Veterinary Research Lab (CVRL) in Dubai, the United Arab Emirates, will continue, especially in regard to cross-checking tests and quality control measures.

Regulations and quarantine measures

(besides other notifiable equine disease regulations)

– Glanders is a notifiable disease. All government and private veterinarians are requested to notify any suspected case of any OIE equine disease to the Directorate of Animal Resources in the Ministry of Agriculture (Ministerial Decision dated 11/03/2011).

– All equines imported to the Lebanon are subject to a pre-import permit based on the country of origin of the horses and laboratory testing. All horses should be accompanied by a health certificate stating that animals have tested negative for glanders and other equine diseases in compliance with the OIE *Code*.

– All equines departing from Lebanon for horse competitions abroad are subject to mandatory testing for glanders and other required equine diseases. If the animals have been abroad for more than 21 days, they are re-tested again upon arrival into Lebanon.

Animal disposal and disinfection

– Animals testing positive for glanders were humanely euthanised.

– Animals were disposed of by deep burial in dry soil and limestone covering.

– Bedding and faecal material were incinerated. Housing premises, utensils and transporting vehicles were thoroughly cleaned then disinfected.

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Disease outbreak history and disease prevalence

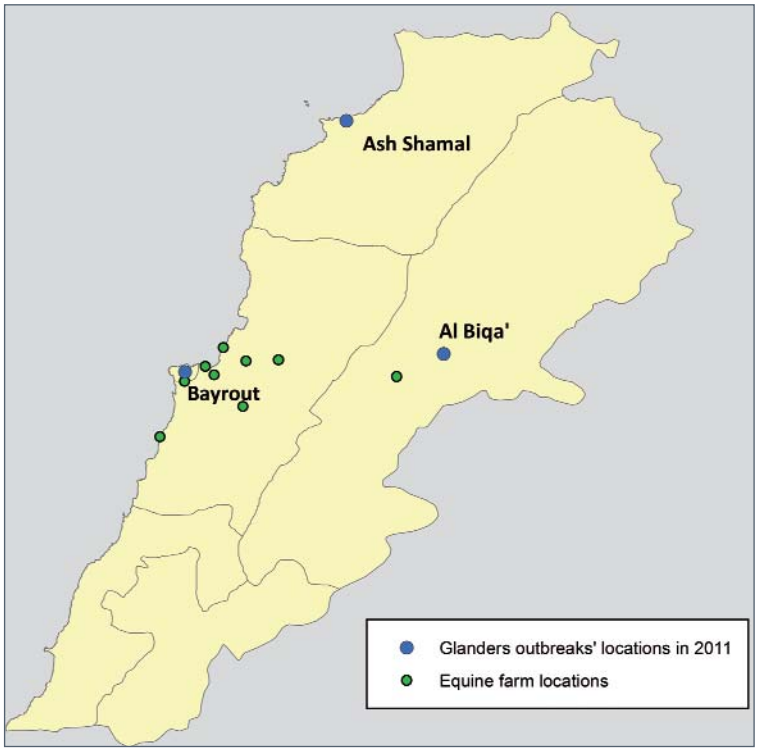
Since April 2011, a surveillance programme has been implemented on all equine populations in all Lebanese territories. Confirmed cases were stamped out with all recommended hygienic procedures. Three outbreaks were notified in Beirut in April 2011, with 68 horses, three cases and 23 destroyed; one outbreak in Tripoli (Ash Shamal) that also started in April with eight susceptible horses, two cases, one death and one destroyed; and an additional outbreak in Bekaa (Al Biqa), with six susceptible horses that tested positive for glanders and were destroyed (see location of the outbreaks on the map).

While the disease struck in these three locations in Lebanon, the source of the infection was found to be the farm in the Bekaa Valley. Nevertheless, all horses in the location of these outbreaks have now been tested at least four to five times (positive and suspected horses were destroyed) and the final result demonstrates the absence of the disease in these locations.

Since 23 August 2011, no positive cases have been identified, and no clinical signs of glanders have been observed in horses in Lebanon.

The surveillance programme will continue, as recommended, for glanders and other major equine notifiable diseases.

According to Chapter 12.10. on glanders of the OIE *Terrestrial Animal Health Code*, since no case has been reported after the last culled case on 23 August 2011, for a period of six months, and an active surveillance programme has been put in place, demonstrating the absence of the disease, in accordance with the general recommendations on animal health surveillance of Chapter 1.4. of the OIE *Terrestrial Animal Health Code*, the Delegate of Lebanon declares his country free from glanders, with effect from 23 March 2012.



news from partners

The OIE's role in global harmonisation of veterinary training and qualifications in laboratory animal medicine

The use of animals is essential to some fields of medical research. The diverse guidance offered around the world on the appropriate qualifications of the laboratory animal veterinarian, and thus the potential variability in the quality of the veterinary medical programme at each institution, can result in tangible consequences for the animal's welfare and for the research (3). These differences may have an impact on how the animals are obtained, the provision of adequate veterinary care, the provision of a suitable environment for the animals (during transport and at the institution), the assurance of an ethical review of the proposed work and appropriate ongoing oversight of the animal care and use programme.

Kathryn Bayne*, David Bayvel, Judy MacArthur Clark, Gilles Demers, Christophe Joubert, Tsutomu Miki Kurosawa, Ekaterina Rivera, Ouajdi Souilem & Patricia V. Turner

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**Corresponding author: Dr Kathryn Bayne, Global Director: kbayne@aaalac.org*

Potential OIE involvement in the area of laboratory animal welfare was first proposed at the 2004 OIE Global Conference on Animal Welfare, and followed by detailed discussions with international organisations, such as the International Council for Laboratory Animal Science (ICLAS) and the International Association of Colleges of Laboratory Animal Medicine (IACLAM). These discussions identified a unique, added-value role for the OIE, as a global and well-established intergovernmental organisation with a commitment to science-based international standards, and led to the development of a chapter on the 'Use of Animals in Research and Education' in the *Terrestrial Animal Health Code* (web.oie.int/eng/normes/mcode/en_chapitre_1.7.8.htm). The OIE also has key strategic interests in the use of animals in research to advance and improve animal health and welfare and to support disease diagnosis and regulatory testing.

The OIE has assumed an international leadership role in providing guidance on the quality of veterinary education, with international conferences held in Paris in 2009 and Lyons in 2011. Work undertaken by an OIE expert group, the members of which include high-level representatives of academic and veterinary professional associations, resulted in the production of recommendations on the competencies that veterinarians should have at the time of graduation ('Day 1 graduates'), to support Veterinary Services (both private and public) in meeting the OIE mandate.

From left to right
First row: Dr Masatsugu Okita, Dr Mariela Varas & Dr Kathryn Bayne
Second row: Dr Christophe Joubert, Dr Sarah Khan, Dr Judy Mac Arthur Clark & Prof. Souilem Ouajdi
Third row: Dr David Bayvel, Dr Tsutomu Miki Kurosawa, Dr Ekaterina Rivera & Dr Gilles Demers

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Consideration of training requirements for veterinarians working in laboratory animal medicine and global harmonisation of relevant veterinary qualifications are thus very timely and fully compatible with the OIE global mandate: 'to improve animal health, veterinary public health, and animal welfare worldwide'.

– to articulate methods for delivering appropriate training to veterinarians who wish to practise laboratory animal medicine
– to determine the breadth and detail of information to be provided to trainees
– to identify potential methods for assessing competency after training
– to evaluate means of ensuring accessibility to and translation of relevant information in laboratory animal medicine and science
– to assess the value of and methods for providing continuing education.

It is most timely, therefore, that steps be taken to address the global harmonisation of veterinary training and qualifications in laboratory animal medicine, by organisations such as the OIE, IACLAM, ILAR and ICLAS

Shared concern about the need to harmonise veterinary qualifications in laboratory animal medicine prompted a collaborative effort by the OIE, IACLAM, and US National Research Council's Institute for Laboratory Animal Research (ILAR) to address this issue, with the following goals:

To assess the veterinary community's perspective on global harmonisation of veterinary qualifications and training in laboratory animal medicine, focus group discussions were convened in association with three pivotal laboratory animal science meetings held during 2010 in separate geographic regions: the June meeting of the Federation of European Laboratory Animal Science Associations (FELASA) in Helsinki; the October meeting of the American Association for Laboratory Animal Science (AALAS) in Atlanta; and the November meeting of the Asian Federation of Laboratory Animal Science Associations (AFLAS) in Taipei. A total of 106 individuals, representing 27 countries, participated in the three focus groups. There was strong consensus among the participants that this topic was both timely and important.

Five key questions were posed to each focus group (based on 2), as follows:

1. What roles do laboratory animal veterinarians serve?
2. What are the core knowledge and practical work-related skills required for proficiency in each laboratory animal veterinary role?
3. What are acceptable educational approaches for imparting core knowledge in laboratory animal medicine?
4. What experiences are most suitable for instilling practical work-related skills in laboratory animal medicine?
5. How much training is required to attain proficiency in laboratory animal medicine?

Core competencies and skills

The participants of the three focus groups generally agreed that the laboratory animal veterinarian should, at a minimum:

– have a sound understanding of the anatomy, physiology, pathology, and behaviour of animals used in research and teaching

– be able to make, understand and respond appropriately to clinical observations and collect samples to aid in the diagnosis of problems observed

– be able to recognise and mitigate animal pain and distress

– be skilled in the diagnostic method and able to interpret diagnostic information, including evaluation of the available health history of the animal

– be able to safely and humanely restrain animals

– be able to administer anaesthesia and analgesia, understanding the most safe and efficacious agents to use for various laboratory animal species

– understand and implement aseptic technique for procedures, including surgery; and have basic surgical skills for common laboratory animals

– be knowledgeable in:

a) moral and ethical issues surrounding the use of animals in research, testing and education

b) tenets of the Three Rs (replacement, reduction and refinement)

c) the regulatory framework for animal use of the country in which they are working.

The ladder approach to skills and knowledge development

Given the lack of consistency in the degree to which the veterinarian is recognised as having a necessary role in the use of animals in research and, thus, in the training made available to these professionals, it was determined that a 'ladder' approach to defining and implementing the appropriate training and experience was a practical and logical method for ensuring the provision of adequate veterinary care and oversight in an animal research programme.

Four levels of support were identified by the focus groups to ensure suitable veterinary qualification and experience:
– an experienced mentor (either on- or off-site) to provide advice and guidance
– on-the-job experience, supplemented with relevant continuing education
– a certificate, residency, diploma or degree programme in laboratory animal medicine; and
– specialty board certification.

An intrinsic part of selecting the training path best suited to the context of animal use is an understanding of the scope and scale of the programme to be supported. Considerations should include the range of species in use at an institution; the types of research, production, testing, or educational programs that use animals; the programme infrastructure (e.g. facility and equipment age, type and condition; the budget for equipment); regulatory requirements for oversight of the animals, research programme and facility; and availability of other specialists at the institution (e.g. occupational health professionals, radiation and biosafety officers, risk management personnel) who can contribute professional expertise.

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Availability and accessibility of information

Global harmonisation of laboratory animal veterinary qualifications depends, in large part, on the availability and accessibility of information (e.g., on-line or print versions of journal articles, books, sample animal care and use programme documents, such as protocol review forms; videos or CDs, webinars, and conferences). Information that is available is not always accessible – for example, it may not be available in the veterinarian's language of choice. Variability in access to relevant information and instructional tools impedes progress in raising the knowledge and skills of laboratory animal veterinarians in developing countries and undermines progress in harmonising standards of competency. A strategy should be developed to seek input from qualified veterinarians around the world to identify core references. This should be followed by efforts to ensure the accessibility (e.g. through translation) and availability of this information. For example, in collaboration with relevant partner organisations, the OIE could assist in providing direct access for its Delegates to a database of references, including legal and scientific documents, written in English and in other languages.

Looking forward

Global communication and networking among laboratory animal veterinarians are essential. With the increase in international research collaborations and international transportation of research animals (e.g. genetically modified mice), the standard of veterinary care – and thus the health and welfare of research animals – is especially crucial to the quality of the work and to ensuring an ethical approach to animal use. Global communication among veterinarians contributes to the harmonisation of skills, knowledge and understanding of laboratory animal medicine and welfare.

The use of animals in research and education will undoubtedly remain a sensitive and high-profile area to which the veterinary medical profession makes a vital contribution in terms of scientific input, animal health and welfare, and public reassurance. It is most timely, therefore, that steps be taken to address the global harmonisation of veterinary training and qualifications in laboratory animal medicine, by organisations such as the OIE, IACLAM, ILAR and ICLAS.

Global communication among veterinarians contributes to the harmonisation of skills, knowledge and understanding of laboratory animal medicine and welfare

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More on this subject may be found in the full article published in the ILAR Journal (1).

References

1. Bayne K., Bayvel D., MacArthur Clark J., Demers G., Joubert C., Kurosawa T., Rivera E., Souilem O. & Turner P. (2011). – Harmonizing veterinary training and qualifications in laboratory animal medicine: a global perspective. *ILAR J.*, **52** (3), 393–403. Available at dels-old.nas.edu/ilar_n/ilarjournal/52_3/pdfs/v5203Bayne.pdf.

2. Bolon B., Barale-Thomas E., Bradley A., Ettlin R.A., Franchi C.A., George C., Giusti A.M., Hall R., Jacobsen M., Konishi Y., Ledieu D., Morton D., Park J.H., Scudamore C.L., Tsuda H., Vijayasarathi S.K. & Wijnands M.V. (2010). – International recommendations for training future toxicologic pathologists participating in regulatory-type, non-clinical toxicity studies. *Toxicol. Pathol.*, **38**, 984–992.

3. Zurlo J., Bayne K. & MacArthur Clark J. (2009). – Adequate veterinary care for animals in research: a comparison of guidelines from around the world. *ILAR J.*, **50** (1), 85–88.

special events

A new global alliance for a safer, fairer and more sustainable livestock sector

www.ilri.org/ilrinews/index.php/archives/8533?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+IlriSpotlight+%28ILRI+Spotlight%29

In the face of a fast-growing, resource-hungry and commonly misunderstood livestock sector, it is clear that increased investment in the sector is essential to livelihoods, global health and the environment. To address livestock as a global public good, a strengthened alliance has been formed among key institutions charged with shaping and steering the global livestock agenda.

We, the representatives of global and regional institutions whose mandates cover livestock, met in Nairobi, Kenya, 12-13 March 2012. We exchanged ideas, concerns, experiences and expertise with the aim of developing closer partnerships, a shared vision and more complementary programmes for a global livestock agenda.

Our consultation came at an opportune time. Global production and consumption of meat, milk and eggs are growing fast, especially in developing countries, in the face of diminishing natural resources. Decision-makers and investors continue to under-appreciate the critical role that livestock play in the lives and livelihoods of the world's poorest people. The world remains alert to the risk of pandemics arising at the interface between people and animals.

We agreed that social equity, global health and the environment should be considered among the strategic 'pillars' of the global livestock agenda. There was also much concurrence on the issues and challenges facing the livestock sector and the ways to address them.

We are building this alliance to work in closer partnerships, with each organisation bringing to bear its comparative advantage. Together we aim to be more effective in explaining to

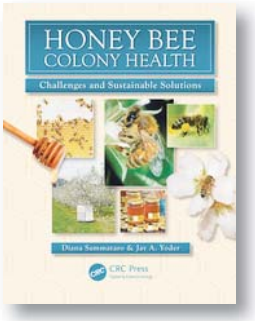
onal news

the world better why livestock are essential to the society and to the health and wellbeing of the poor and to show leadership in addressing the challenges and opportunities that livestock can bring.

We will do this by marshalling the best evidence to support our case; directly addressing the harm as well as benefits generated by livestock; learning from successes and failures to design and implement the most appropriate programmes and policies; exploiting advances in our understanding of complex systems and powerful new technologies; and building on existing successful initiatives. We aim to develop strategic goals, and to create, and share publicly, a means to measure progress against these goals.

We invite our colleagues in other institutions, public and private, to join us.

publications



In English
November 2011
320 pages
ISBN : 978-1-439879-405
CRC Press

Honey-Bee Colony Health: Challenges and Sustainable Solutions

Edited by Diana Sammataro & Jay A. Yoder

The primary task of modern commercial beekeeping has changed from honey production to crop pollination. With this change has come extraordinary stress – colonies are moved many times in a year, increasing their exposure to diseases, parasites and hive pests. Antibiotics and acaricides are being applied more frequently, resulting in resistance and comb contamination. The future use of bee colonies as mobile pollinator populations requires modern management methods with fresh perspectives on nutrition, breeding practices and the role of microbes in sustaining colony health.

Honey-bee colonies are in greater demand and commanding higher rental fees than ever before. Finding ways to prevent outbreaks of disease and to control parasites is essential for reducing colony losses. The accumulation of knowledge from a range of bee scientists, *Honey Bee Colony Health: Challenges and Sustainable Solutions* aims to inspire future generations of researchers, beekeepers and students to continue to study bees and to keep them healthy and pollinating.

In English
February 2012
256 pages
ISBN : 978-1-84593-664-8
orders@cabi.org

External Parasites of Small Ruminants
A Practical Guide to their Prevention and Control
Edited by P. Bates.

Sheep and goats are farmed throughout the world for meat, fibre, milk and leather. These small ruminants are very susceptible to external parasites, a fact which has significant implications for their health and welfare, as well as for the quality and value of the end products for which they are farmed.

This book gives practical guidance on preventing and controlling the ectoparasites that contribute to disease and infection in sheep and goats, discussing the types of parasites, the diseases they cause and what methods of control are available, as well as exploring wider implications, such as animal welfare and environmental impacts. It will be a valuable addition to the resources of large-animal veterinarians and parasitologists, farmers, farming industry personnel, and students of animal and veterinary sciences.

agenda 2012

July

35th Session of the Codex Alimentarius Commission
2-7 July
Rome (Italy)
www.codexalimentarius.net/web/current.jsp?lang=en
Codex@fao.org

SPS Committee (Agreement on the Application of Sanitary and Phytosanitary Measures)
9-13 July
Geneva (Switzerland)
trade.dept@oie.int

Joint Wildlife Disease Association/ European Wildlife Disease Association Conference – Convergence in Wildlife Health
22-27 July
Lyons (France)
wda2012.vetagro-sup.fr/

46th Congress of the international society of applied ethology (ISAE)
31 July – 4 August
Vienna (Austria)
trade.dept@oie.int
wda2012.vetagro-sup.fr/

August

International Symposium on Veterinary Epidemiology and Economics
20-24 August
Maastricht
(The Netherlands)
a.seeverens@zinmaastricht.nl
www.isvee13.org/

OIE Scientific Commission for Animal Diseases
27-31 August
OIE Headquarters
Paris (France)
oie@oie.int

September

OIE Terrestrial Animal Health Standards Commission
3-14 September
OIE Headquarters
Paris (France)
trade.dept@oie.int

1st International Conference on Dog Population Management 2012
4-8 September
York (United Kingdom)
www.fera.defra.gov.uk/

9th International Congress of Veterinary Virology
5-7 September
Madrid (Spain)
www.esvv.eu

OIE Biological Standards Commission
10-14 September
OIE Headquarters
Paris (France)

25th Conference of the OIE Regional Commission for Europe
18-21 September
Fleesensee (Germany)
regactivities.dept@oie.int

IABS (International Association for Biologicals) Conference: Alternatives to Antibiotics in Animal Health: Challenges and Solutions
26-28 September
OIE Headquarters
Paris (France)
oie@oie.int

October

SPS Committee (Agreement on the Application of Sanitary and Phytosanitary Measures)
15-18 October
Geneva (Switzerland)
trade.dept@oie.int

Global Symposium LFDA / GRID Animal rights
18-19 October
OIE Headquarters
Paris (France)
www.rwi.uzh.ch/lehreforschung/postdocs/animallaw/Links/Registration.pdft

6th International Conference on Antimicrobial Agents in Veterinary Medicine (AAVM 2012)
23-26 October
Washington D.C.
(United States of America)
aavm@targetconf.com

November

3rd OIE Global Conference on Animal Welfare
6-8 November
Kuala Lumpur (Malaysia)
oie@oie.int

21st Conference of the OIE Regional Commission for the Americas
26-29 November
Barbados
regactivities.dept@oie.int

2013

February

20th Conference of the OIE Regional Commission for Africa
February
Lome (Togo)
regactivities.dept@oie.int

March

Regional (Americas) Seminar for OIE National Focal Points on Aquatic Animals
4-8 March
Mexico
regactivities.dept@oie.int

OIE Global Conference on the Prudent Use of Antimicrobial Agents for Animals
13-15 March
OIE Headquarters
Paris (France)
oie@oie.int

September

31st World Veterinary Congress and 150th anniversary of the World Veterinary Association (WVA)
17-20 September
Prague (Czech Republic)
www.wvc2013.com/en/welcome
wvc2013@guarant.cz

Regional (Africa) Seminar for OIE National Focal Points on Communication
23-27 September
Niamey (Niger)
regactivities.dept@oie.int

Regional (Asia–Pacific) Seminar for OIE National Focal Points on Communication
25-27 March
People's. Rep. of China
regactivities.dept@oie.int

October

12th Conference of the OIE Regional Commission for the Middle East
October
regactivities.dept@oie.int

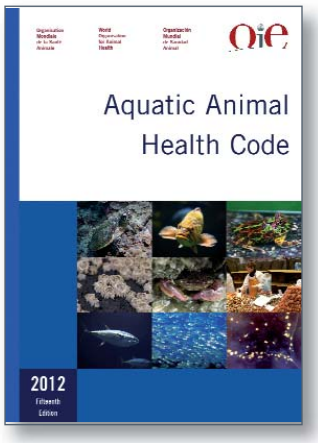
November

28th Conference of the OIE Regional Commission for Asia, the Far East and Oceania
November
Philippines
regactivities.dept@oie.int

Regional (Africa) Seminar for OIE National Focal Points on Communication
25-29 November
Nairobi (Kenya)
regactivities.dept@oie.int

questions and answers

Does the mandate of the Aquatic Animal Health Standards Commission (the Aquatic Animals Commission) cover animal welfare and animal production food safety, as is the case with the Terrestrial Code Commission?



Yes, in 2009, the World Assembly of Delegates adopted the proposal to expand the mandate of the Aquatic Animals Commission to address:
1) the welfare of aquatic animals and
2) food safety risks associated with the production of aquatic animals (Resolution No. 29).

Bearing in mind that the Terrestrial Code Commission has been addressing animal welfare and animal production food safety issues in its work programme since 2002, OIE Members supported broadening the mandate of the Aquatic Animals Commission to also cover these concerns. This reflects the increasing production of, and international trade in, aquatic animal products globally and the implications of such development for animal and public health. Since the adoption of the expanded mandate, the Aquatic Animals Commission has developed new standards on the safety of aquatic animal feed; the prudent use of antimicrobial agents; and the welfare of farmed fish during transport and stunning and killing for human consumption.

Reporting the disease status of aquatic animals

Reporting aquatic animal disease events is necessary to minimise the spread of aquatic animal diseases and their aetiological agents and to assist in achieving better worldwide control of these diseases. Member Countries must comply with the reporting requirements specified in Chapter 1.1. of the OIE *Aquatic Animal Health Code* (the *Aquatic Code*) (www.oie.int/index.php?id=171&L=0&htmfile=chapitre_1.1.1.htm) and make their aquatic animal disease status available to other countries, through the OIE WAHIS interface, using immediate notification and follow-up reports for exceptional events, and six-monthly reports for the presence and absence of OIE-listed aquatic animal diseases within the country. Additionally, they are required to provide, through their annual reports, information on aquatic production, on the National Reference Laboratories and on the different diagnostic tests performed for aquatic animal diseases.

The *Aquatic Code* is reviewed annually to address new scientific, technical and epidemiological information that becomes available. New diseases may be added to the OIE list, when appropriate, and a clear

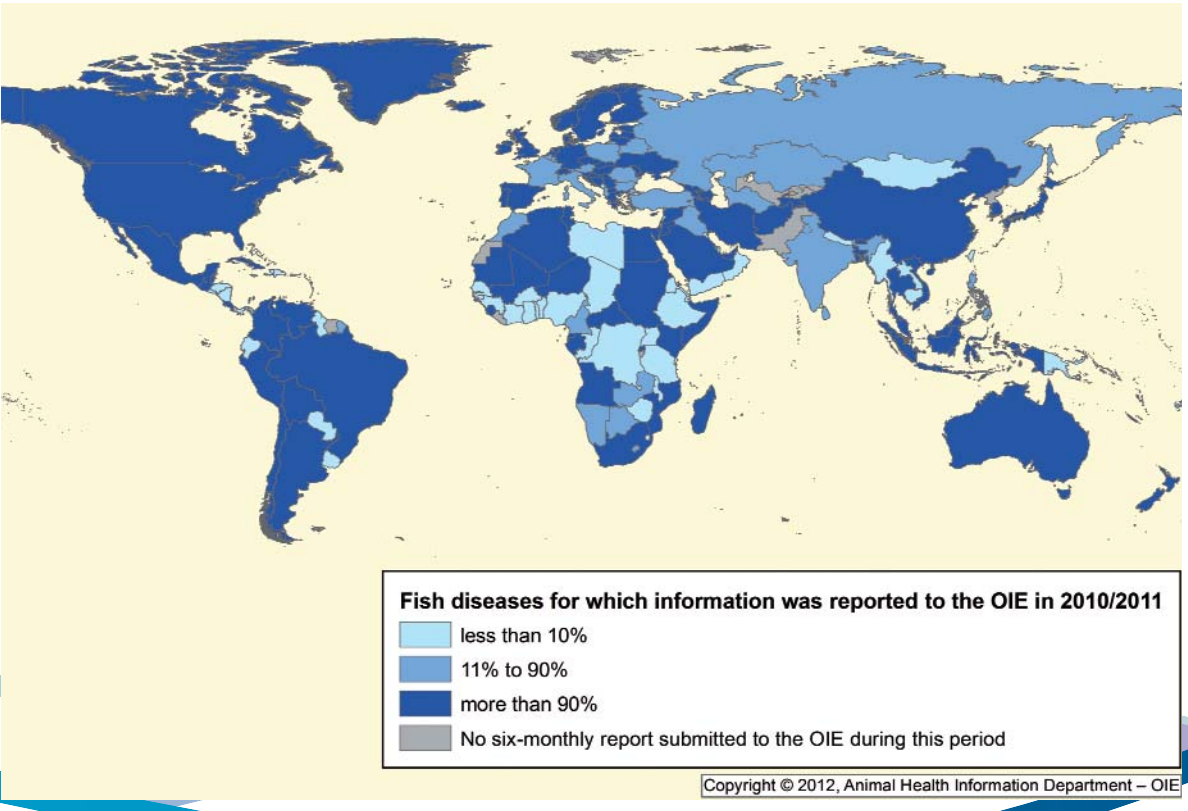


Fig. 1
Reporting completeness expressed by the percentage of the OIE listed fish diseases for which information was provided during 2010/2011

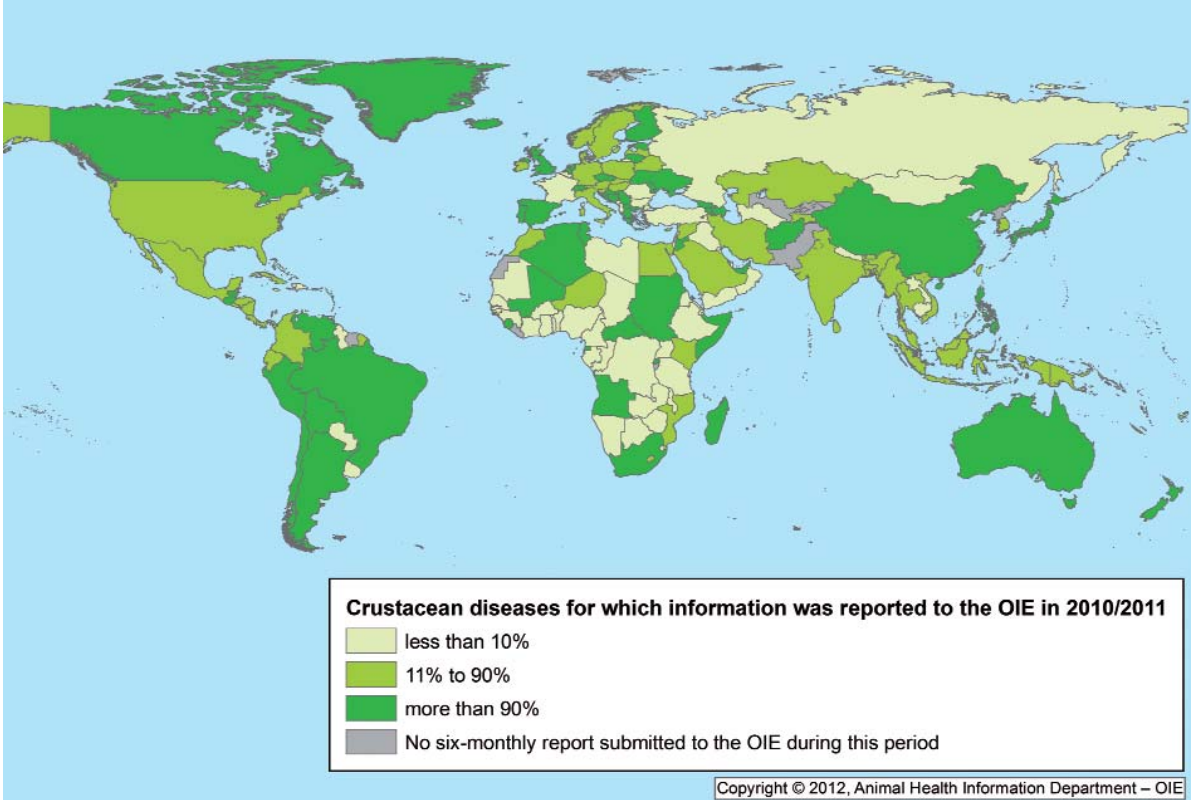


Fig. 2
Reporting completeness expressed by the percentage of the OIE listed crustacean diseases for which information was provided during 2010/2011

evolution can be observed when evaluating the number of aquatic animal diseases listed for the various species. Thus, in 2002, the *Aquatic Code* included five diseases for fish, five for molluscs, three for crustaceans and none for amphibians; whereas, in the current edition (2011), it includes nine diseases for fish, seven diseases for molluscs, eight for crustaceans and two for amphibians. The criteria for the inclusion of new aquatic animal diseases in the list may be summarised as follows:

1. if a new infectious aetiology of the disease is proven or an infectious agent is strongly associated with the disease (even if the aetiology is not yet defined)
2. if the agent is of public health concern or has a significant spread in naive populations of wild or cultured aquatic animals.

The application of these criteria resulted in the decision to list the koi herpesvirus disease in 2006. The increase in the number of listed diseases of aquatic animals reflects the growing importance of aquaculture as a source of high-quality protein for the global population.

Disease reporting must be based on monitoring and surveillance programmes implemented by all OIE Member Countries and is particularly important for those with a significant aquaculture sector who participate in international trade of aquatic animals (including seed, spat, etc.) and their products. The OIE list of diseases in the

Aquatic Code covers a wide range of species, including aquatic animals found in both freshwater and marine production systems. It is important to bear in mind that aquatic animal diseases that occur in land-based culture systems (e.g. lakes, rivers and ponds) also need to be notified and, therefore, aquatic animal disease status must be reported by all Members, not just those with marine production systems. In Figures 1–3, we see the differences between countries and regions in reporting aquatic animal diseases. In these maps, dark colours reflect more comprehensive aquatic animal disease reporting and light colours reflect poor disease reporting. The pattern varies, according to the different species. Reporting of fish diseases (Fig. 1) is the most comprehensive, with a large proportion of countries shown in dark blue, followed by crustaceans (Fig. 2), then molluscs (Fig. 3). These maps provide a good overview of the current situation for aquatic animal disease reporting. The OIE encourages all Members to improve disease reporting in accordance with the provisions in the *Aquatic Code*.

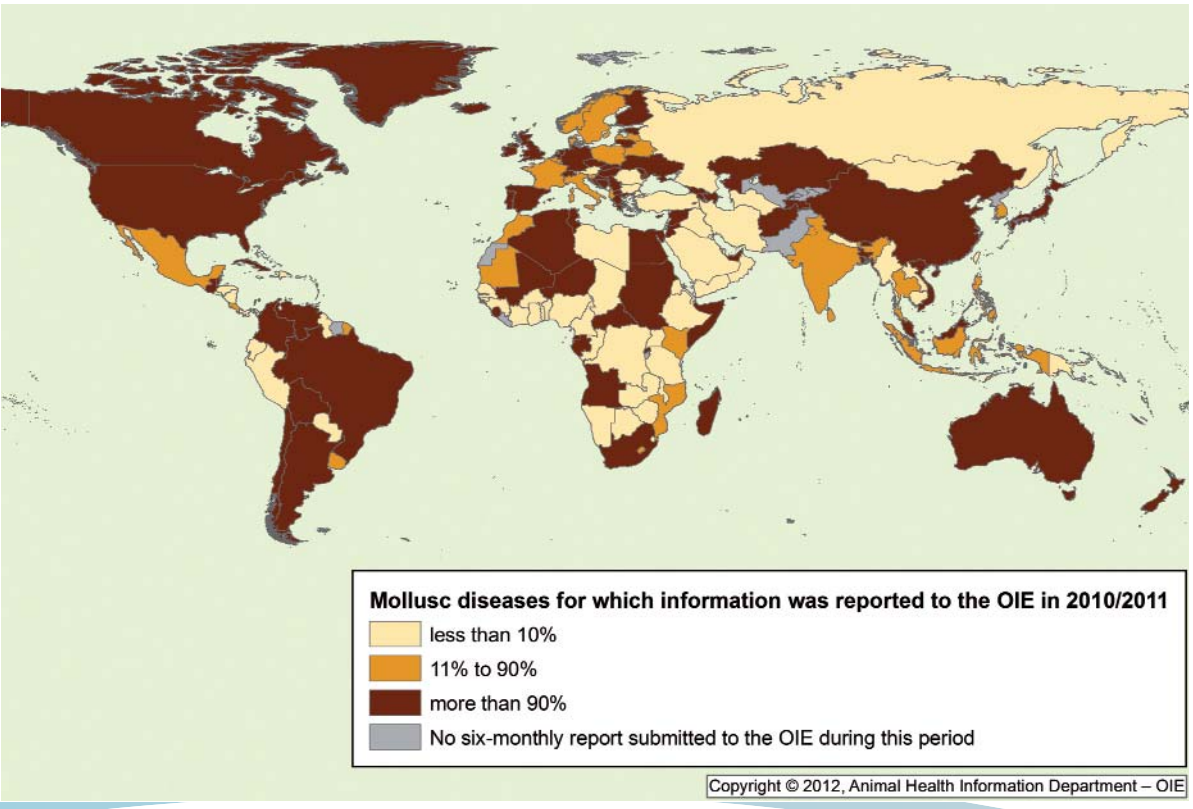


Fig. 3
Reporting completeness expressed by the percentage of the OIE listed mollusc diseases for which information was provided during 2010/2011

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Around 400 participants from over 100 countries attended this unique international forum. They included representatives from national authorities and the private sector, as well as from international, regional and national organisations.

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