The Veterinary Services in the front line

Protecting human health

Food security

Food safety

Protecting animal health

Market access

Animal welfare

OIE INITIATIVES AND ACTIVITIES ON VETERINARY EDUCATION
EVOLUTION OF THE WORK OF THE OIE ON VETERINARY EDUCATION

1st Conference (Paris, 2009)

Ad hoc Group (established in 2010)

Day 1 Competencies (published in 2012)

2nd Conference (Lyon, 2011)

Model Core Curriculum (published in 2013)

3rd Conference (Brazil, 2013)

1st Twinning Project (started in 2013)

4th Conference (Bangkok, 2016)

OIE VEEs list (published in 2015)
Ad hoc Group on Veterinary Education

- Created by a recommendation of the 1st Global Conference
- Six meetings since 2010 to 2015
- Consisting of Deans or senior educators of VEEs worldwide

Members of Group 2015

- Dr Ron DeHaven (Chair, American Veterinary Medical Association)
- Dr René A. Carlson (World Veterinary Association)
- Dr Saeb Nazmi El-Sukhon (Jordan University of Science & Technology)
- Dr Khwanchai Kreausukon (Chiang Mai University)
- Dr Stéphane Martinot (VetAgro Sup)
- Dr Aaron S. Mweene (University of Zambia)
- Dr Timothy Ogilvie (St. George’s University)
- Dr Pan Dong Ryu (Seoul National University)
- Dr Felipe Antônio Wouk (Federal Council of Veterinary Medicine, Brazil)

Meeting reports are available at: http://www.oie.int/en/support-to-oie-members/veterinary-education/ad-hoc-group-on-veterinary-education/
In response to a recommendation adopted at the 1st OIE Global Conference of Veterinary Education, which included many veterinary Deans and educators, the OIE convened an ad hoc Group on Veterinary Education. The ad hoc Group’s work bore fruit in relation to the development of OIE guidelines on veterinary education, namely the OIE Recommendations on the Competencies of graduating veterinarians (‘Day 1 graduates’) to assure National Veterinary Services of quality and the OIE Guidelines on Veterinary Education Core Curriculum. The ad hoc Group also provides valuable advice to the OIE in the domain of Veterinary Education generally, including the scope of its Global Conferences.

The reports of the successive meetings of the ad hoc Groups, each endorsed by the OIE Code Commission, are as follows:

+ 1st meeting (29 June–1 July 2010)
+ 2nd meeting (15–17 December 2010)
+ 3rd meeting (2–4 August 2011)
+ 4th meeting (11–13 January 2012)
+ 5th meeting (24–25 July 2012)
+ 6th meeting (30–31 July 2015)
OIE Day 1 Competencies

- Recommendation (NOT compulsory)
- Applicable to all (NOT prescriptive)
- Countries may add competencies of their own importance
- Competencies cover both terrestrial and aquatic animals
OIE Day 1 Competencies

- **Minimum Competencies**: needed by graduating veterinarians to be adequately prepared to participate in National Veterinary Services (both public and private sector) at the entry level.

- **Basic Competencies**: required for a veterinarian to be licensed by a Veterinary Statutory Body and directly relate to the OIE mandate.

- **Advanced Competencies**: required for a veterinarian to work within the Veterinary Authority.

The Day 1 graduate should have mastery of basic competencies and a general awareness of advanced competencies.
OIE Day 1 Competencies

Basic Competencies

- Epidemiology
- Transboundary animal diseases
- Zoonoses (incl. food-borne diseases)
- Emerging and re-emerging diseases
- Disease prevention and control programmes
- Food hygiene
- Animal welfare
- Veterinary products
- Veterinary legislation and ethics
- General certification procedures
- Communication skills

Advanced Competencies

- Organisation of Veterinary Services
- Inspection and certification procedures
- Management of contagious disease
- Food hygiene
- Application of risk analysis
- Research
- International trade framework
- Administration and management
OIE Guidelines: Core Curriculum

“a companion to Day 1 Competencies as a tool for VEE when developing curricula”

Competencies are translated into

**Model Core Curriculum**

21 courses are identified with
- Sequence in Curriculum;
- Day 1 Competencies addressed;
- Description
### Examples

<table>
<thead>
<tr>
<th>Course</th>
<th>Sequence in VEE Curriculum</th>
<th>Day 1 Competencies</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio-mathematics</td>
<td>Early</td>
<td>Epidemiology</td>
<td>Biomathematics is the application of mathematics to the field of biology and includes instruction in biomedical statistics, information acquisition, and the use of common mathematical and statistical software. Course content should provide the veterinary student with a broad understanding of fundamental principles of biomathematics including…….</td>
</tr>
<tr>
<td>Communication</td>
<td>Through-out</td>
<td>Communication skills</td>
<td>Administration &amp; Management</td>
</tr>
</tbody>
</table>

A separate series of classes focusing only on writing or speech skills need not be included in the curriculum. Instead, the appropriate communication skills should be taught in relevant classes (e.g., medical record writing and client communication in clinical and diagnostic skills courses; critical reading and thinking in epidemiology, immunology and microbiology).……….  

There include 21 recommended courses in the Model Core Veterinary Curriculum.
# 21 courses in the Core Curriculum

## Early
- Biochemistry
- Genetics
- Anatomy
- Physiology
- Immunology
- Biomathematics

## Mid
- Animal welfare and ethology
- Parasitology
- Pharmacology/toxicology
- Pathology
- Transmissible diseases
- Microbiology
- Epidemiology

## Late
- Rural economics, business management, and animal production
- Clinical and diagnostic sciences
- National and international veterinary legislation
- Herd health management and nutrition
- Public health
- Food safety/hygiene
- Professional jurisprudence and ethics

- Communication
OIE Twining Projects for Veterinary Schools

- Based on the success of the OIE laboratory twinning
- Based on the “Day 1 Competencies” and “Core Curriculum”

Project completed (with funding through the OIE)

- University of Minnesota (USA) – Chiang Mai University (Thailand)
**OIE Twining Projects for Veterinary Schools**

Projects underway (with funding through the OIE)

- National Veterinary School of Toulouse (France) – Kazakh National Agrarian University of Almaty (Kazakhstan)
- Tufts University (USA) – Chittagong Veterinary and Animal Science University (Bangladesh)
- Royal Veterinary College (UK) – Jordan University of Science and Technology (Jordan)
- University of Queensland (Australia) – Nong Lam University (Vietnam)
- Ohio State University (USA) – University of Gondar (Ethiopia)
- VetAgro Sup (France) – Bila Tserkva National Agrarian University (Ukraine)
- Kansas State University (USA) – Sokoine University of Agriculture (Tanzania)
OIE Twining Projects for Veterinary Schools

Project endorsed by the OIE (without funding through the OIE)

- Massey University (New Zealand) – University of Peradeniya (Sri Lanka)

One page summary of all projects is available on website.
OIE Global list of VEEs

- Established based on a recommendation of the 3rd Global Conference
- Based on the reports of 157 Member Countries (21 from Asia and the Pacific), the OIE Global List incorporates information on 553 VEEs worldwide (152 from Asia and the Pacific)

Communication missing between VEEs and Delegates?
# OIE Global list of Veterinary Education Establishment

In response to the recommendations adopted at the 2013 OIE Global Conference on Veterinary Education and the role of the Veterinary Statutory Body, the OIE further refined the proposed questionnaire to establish this OIE global list of Veterinary Education Establishments (VEEs).

Based on the reports of 150 Member Countries, the OIE Global List of VEEs 2015 was established, incorporating information on 510 VEEs throughout the world. The list will be revised as necessary according to information provided by Member Countries.

### Veterinary Educational Establishments in OIE Member Countries

<table>
<thead>
<tr>
<th>Name of the country</th>
<th>Number of reported VEEs</th>
<th>Show summary list</th>
<th>Show detailed list</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFGHANISTAN</td>
<td>-</td>
<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>ALBANIA</td>
<td>1</td>
<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>ALGERIA</td>
<td>4</td>
<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>ANDORRA</td>
<td>0</td>
<td>There is no VEE in the country</td>
<td>📑</td>
</tr>
<tr>
<td>ANGOLA</td>
<td>1</td>
<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>ARGENTINA</td>
<td>10</td>
<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>ARMENIA</td>
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<td>📑</td>
<td>📑</td>
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<tr>
<td>AUSTRALIA</td>
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<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>AUSTRIA</td>
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<td>📑</td>
</tr>
<tr>
<td>AZERBAIJAN</td>
<td>1</td>
<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>BAHAMAS</td>
<td>-</td>
<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>BAHRAIN</td>
<td>-</td>
<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>BANGLADESH</td>
<td>2</td>
<td>📑</td>
<td>📑</td>
</tr>
<tr>
<td>BARBADOS</td>
<td>0</td>
<td>There is no VEE in the country</td>
<td>📑</td>
</tr>
<tr>
<td>BELARUS</td>
<td>2</td>
<td>📑</td>
<td>📑</td>
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</tbody>
</table>
## Number of Veterinary Education Establishments reported by Members

<table>
<thead>
<tr>
<th>OIE Region</th>
<th>OIE Members</th>
<th>Number of Members reported as having VEE</th>
<th>Number of Members reported as no VEE</th>
<th>Total number of VEEs in the region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>54</td>
<td>25</td>
<td>20</td>
<td>51</td>
</tr>
<tr>
<td>Americas</td>
<td>29</td>
<td>21</td>
<td>5</td>
<td>180</td>
</tr>
<tr>
<td>Asia / Pacific</td>
<td>32</td>
<td>21</td>
<td>9</td>
<td>162</td>
</tr>
<tr>
<td>Europe</td>
<td>53</td>
<td>41</td>
<td>7</td>
<td>145</td>
</tr>
<tr>
<td>Middle East</td>
<td>12</td>
<td>6</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>180</strong></td>
<td><strong>114</strong></td>
<td><strong>43</strong></td>
<td><strong>553</strong></td>
</tr>
</tbody>
</table>
## Year of Education

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
<th>4-year</th>
<th>5-year</th>
<th>6-year</th>
<th>7-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>51</td>
<td>4</td>
<td>15</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>Americas</td>
<td>180</td>
<td>36</td>
<td>126</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Asia/ Pacific</td>
<td>162</td>
<td>30</td>
<td>69</td>
<td>63</td>
<td>0</td>
</tr>
<tr>
<td>Europe</td>
<td>145</td>
<td>3</td>
<td>97</td>
<td>43</td>
<td>2</td>
</tr>
<tr>
<td>Middle East</td>
<td>15</td>
<td>0</td>
<td>14</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>553</strong></td>
<td><strong>73</strong></td>
<td><strong>321</strong></td>
<td><strong>156</strong></td>
<td><strong>3</strong></td>
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</tbody>
</table>
# Granting of recognition

<table>
<thead>
<tr>
<th>Region</th>
<th>Total #</th>
<th>No recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>51</td>
<td>13</td>
</tr>
<tr>
<td>Americas</td>
<td>180</td>
<td>31</td>
</tr>
<tr>
<td>Asia / Pacific</td>
<td>162</td>
<td>50 (31%)</td>
</tr>
<tr>
<td>Europe</td>
<td>145</td>
<td>16</td>
</tr>
<tr>
<td>Middle East</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>553</td>
<td>124 (22%)</td>
</tr>
</tbody>
</table>
Short analysis of OIE Global List on VEEs
The 4th Global Conference on Vet Education

Bangkok (Thailand) 22-24 June 2016

Topics discussed:

Session 1: Veterinary Education: Global Progress

Session 2: How to support VEEs to implement Day 1 Competencies and the Model Core Curriculum

Session 3: Improving other important skills such as leadership, communication, economics and life-long learning

Session 4: Best teaching practices in the information age
4th OIE Global Conference on Veterinary Education

Recommendations

Encourage VEEs to enhance curricula by regional cooperation and OIE Twinning

Encourage VEEs to evaluate and study innovative teaching methods

Ensure effective mechanisms for continuing education

Ensure VSIs impose minimums for continuing education

Develop or modernize Veterinary Legislation so Vets and Para-professionals are covered

Maintain comprehensive understanding of Vet paraprofessionals

To Veterinary Authorities of OIE Member Countries

Further encourage Veterinary Education Establishments to implement DAY 1 competencies + Model Vet core curriculum + monitor
**RECOMMENDATIONS**

**CONTINUE advocating for implementation of outcome-based assessment**

**CONSIDER expanding its work to better cover VPPs working in VSs**

**CONTINUE to support the OIE member countries to improve the quality of their veterinary services, notably: VLSF, VE twinning, VSB support.**

**CONTINUE efforts to inform countries and VEEs about harmonizing education regionally & globally.**

**CONTINUE to advocate for donors to provide support.**
Conference abstracts, presentations and summary papers

One page summary of twinning projects also available

http://www.oie.int/eng/vet-education-conf2016/introduction.htm
Follow up Actions on Veterinary para-professionals since the 4th global conference

Ad hoc Group on VPP with the support of IIAD

- Three VPP tracks considered: animal health, veterinary public health and laboratory
- Project on VPPs funded by US DTRA started in June 2016
- “minimum competencies” and “core training curricula”
- Initial work presented to Specialist Commissions in Feb 2017
- Document SG 56/12/CS1 B Annex 40
- Subgroups examined details to address the needs of three tracks
Ongoing actions

- Draft minimum competencies to be developed for Members’ review
- Preliminary outcomes will be presented at a Regional Conference on VPP in Asia in December 2017 jointly organised by OIE and GALVmed
- Set of existing VPP curricula being reviewed
- Minimum competencies and core training curricula being reviewed and refined
- Core training curricula will be developed based on the draft minimum competencies for the three VPP tracks
- Final outcomes will be on the OIE website for Members’ reference

Ad hoc Group on VPP with the support of IIAO
The Regional Conference aims to:

1. increase understanding of OIE’s conception of the scope of VPPs as stipulated in the OIE Terrestrial Animal Health Code and with reference to the OIE PVS tool and the importance of VPPs in the global development field in terms of the delivery of quality veterinary services;

2. review the current situation of VPPs in Asia, notably their training, qualification and status, and the challenges they are experiencing;

3. review the realities of the needs of the veterinary services in the field in Asia and discuss how best VPPs may contribute to the delivery of quality veterinary services in cooperation with other cadres of actors, notably veterinarians and CAHWs;

4. review the on-going OIE work of identifying minimum competencies for the three streams of VPPs and developing guidelines on core training curricula from the viewpoint of regional applicability; and

5. explore options for recognising, accrediting and regulating VPPs in the delivery of quality veterinary services that are appropriate to individual countries’ contexts.
Programme outline

- Country testimonies: perspectives from Veterinary Authorities
- Country testimonies: Regulatory and administrative frameworks
- Round table discussion: perspectives from the field
- The training of veterinary para-professionals in Asia and Pacific
- OIE’s on-going work on competency and curricula
- Working Group sessions:
  - Linking veterinarians and veterinary para-professionals – how to go about it in compliance with OIE standards.
  - Role of VPPs to ensure prudent use of antimicrobials
Thank you for your attention

Organisation Mondiale de la Santé Animale

World Organisation for Animal Health

Organización Mundial de Sanidad Animal
Support to OIE Members

The OIE’s founding mandate has evolved and has been adapted to Members’ needs; it now includes the following specific missions:

- To collect, analyse and disseminate relevant scientific information, especially on disease control methods and animal welfare;
- To provide expertise in the control of animal diseases including zoonoses, as well as at the animal-human-ecosystems interface, while taking into account the “One Health” concept whenever possible;
- To ensure safety of world trade in animals and animal products by preparing, adopting and promoting the application of relevant health standards for such trade, as defined in the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the ‘SPS Agreement’);
- To improve the safety of food of animal origin from hazards originating in animal production;
- To establish standards and guidelines for animal welfare through a science-based approach and promote their application;
- To improve the legal framework, competency and resources of national Veterinary Services, and particularly their global public good components;
- To address animal health issues related to poverty alleviation and the assurance of food security;
- To provide expertise to Members in understanding and managing the effect of environmental and climate changes on animal health and welfare;

The OIE has recently decided to help OIE Members to better implement the international standards which they have adopted, through support programmes financed by funds other than membership contributions. These voluntary contributions are received and managed within the framework of the OIE World Animal Health and Welfare Fund.

In order to meet the overarching objective and priority of the OIE “to improve animal health and welfare worldwide regardless of the cultural practices or the economic situations in member countries,” the OIE has developed the following concrete support activities for its Members.

The PVS Pathway

The PVS Pathway corresponds to a global programme for the sustainable development of a country’s veterinary services. This global programme encompasses a PVS Evaluation (qualitative diagnosis on compliance with quality standards; providing baseline information), a PVS Gap Analysis (including Veterinary Services Strategic Priorities, and specific capacity building activities, projects and programs). The possible topics for action comprise veterinary legislation, public/private partnerships, veterinary education, laboratories (mainly in the form of OIE Training Projects), followed by regular PVS Pathway follow-up missions to monitor progress made.

Capacity building activities

Regional capacity building programmes for OIE Members’ Veterinary Services are established annually. Such programmes aim to strengthen animal disease surveillance and control, early outbreak detection and rapid response at both a regional and national level. This also facilitates networking between Country Delegates to the OIE and OIE National Focal Points.

OIE Regional Representatives and Sub-Regional Representatives in the country (contact persons for relations with the OIE) specialised in relevant technical fields.
Veterinary education

The provision of high quality veterinary education is key to equipping potential veterinarians with the necessary knowledge to perform efficiently and to support Veterinary Services effectively. In many developing and transition countries, the quality of veterinary education is failing to meet the requirements for delivering highly competent Veterinary Services. This has therefore highlighted the need for veterinary education to be strengthened, with particular emphasis on establishing minimum competencies and harmonising key curriculum elements to facilitate international mobility of veterinarians.

The OIE Recommendations on the Competencies of graduating veterinarians (Day 1 graduates) to ensure National Veterinary Services of quality provide a basis for advanced training and education for veterinarians wishing to pursue a career in the public or private components of national veterinary services. These recommendations prepare the Day 1 veterinary graduate to promote global veterinary public health and are applicable to all OIE Member Countries.

To support these recommendations, the OIE has developed guidelines for a model core veterinary curriculum. It is strongly recommended that the guidelines be consulted by veterinary education establishments in OIE Member Countries when developing veterinary medical education. The OIE Guidelines on Veterinary Education Core Curriculum represent a basis on which national needs and circumstances could be added, and are offered primarily to developing and transition countries as an initial step to enhance and sustain national Veterinary Services.

As a means of improving institutional capacity and expertise in these countries, the OIE has initiated its twinning programme between Veterinary Education Establishments. Each project under this programme is a partnership between one or more recognised or accredited Veterinary Education Establishments, known as the Parent, and a Candidate Veterinary Education Establishment. The overall aim of the OIE Veterinary Education Twinning Programme is to foster quality veterinary education through the exchange of teachers and students, thereby allowing a better geographic balance of well-educated veterinarians. The OIE Guide to Veterinary Education Twinning Projects details the scope and processes involved in a twinning project. The length of the project would depend on its scope. OIE twinning projects last a minimum of one year and a maximum of three years (extensions may be envisaged).

Contact: Dr Alan Dehove (a.dehove@oie.int)

Lessons, experiences and outputs
- UMN, USA and Chiang Mai, Thailand (Newsletter 5)
- UMN, USA and Chiang Mai, Thailand (Newsletter 4)
- UMN, USA and Chiang Mai, Thailand (Newsletter 3)
- UMN, USA and Chiang Mai, Thailand (Newsletter 2)
- UMN, USA and Chiang Mai, Thailand (Newsletter 1)

CMU-MNU Newsletter