How to Improve Animal Health Worldwide

Evolving Veterinary Education for a Safer World
Paris, October, 12-14, 2009

Bernard Vallat
Director General
Key messages
Trends in Global Population


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<th>Total</th>
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Source: US Bureau of the Census

Source: Center for Disease Control and Prevention (CDC) Atlanta
Trends in animal protein consumption

- Shift from poverty to middle-class (1 billion people expected)
- Increase of number of daily meals
- More milk, eggs and meat in meals
- Some projections toward 2020 indicate that the demand for animal protein will increase by 50%, especially in developing countries.
Globalisation

- Unprecedented movements of commodities and people, used by pathogens to colonise all the planet and to increase their aggressiveness.

- There is no where in the world from which we are remote and no one from whom we are disconnected.
Nowadays pathogens are transported around the world faster than the average incubation time of most epizootics.

Climate changes and human behaviour allow colonisation of new territories by vectors and pathogens (e.g. bluetongue in Europe)
Animal health is a key component of food security, food safety and public health

- **1 billion** poor farmers and workers survive thanks to livestock
- Impact of animal diseases on losses on animal production (and on animal products) worldwide exceed 20%
- Strong links between animal health, food security and public health
- Animal proteins are crucial for humans
- Global intensification of animal production cannot be avoided at global level
- We need to be ready
Zoonotic potential of animal pathogens

- 60% of human pathogens are zoonotic
- 75% of emerging diseases are zoonotic
- 80% of agents having a potential bioterrorist use are zoonotic pathogens
Solutions

Which concepts to promote for protecting countries and regions from current and emerging threats for animal and humans?
Outline

- The Global Public Good concept
- The Good governance concept
- The « One World, One Health » concept
- Horizontal and peace time approach
- OIE available tools
The Global Public Good Concept

Global public goods are goods whose benefits extend to all countries, people and generations.
The Global Public Good Concept

- In the case of control and eradication of infectious diseases, the benefits are international and inter-generational in scope.
- Now countries depend on each other.
- Animal health systems are not a commercial nor a strictly agricultural good. They are fully eligible to national and global public resources.
- Failure of one country may endanger the entire planet.
Main benefits linked with improvement of animal health systems

Control of animal diseases contributes to:

- Food Security: strong link with Public Health
- Public Health: zoonoses, food safety
- Market Access: local, regional and international
- Poverty Alleviation
  - Securing assets (animal capital)
  - Increasing productivity and food production
- Animal health is a key component of ANIMAL WELFARE
Main benefits linked with improvement of animal health systems (cont'd)

- Animal health systems improve food security and food safety
- Food Security is a key public health concern
- Food security is a key component of poverty reduction

is veterinary education a Global Public Good?
The Good Governance

Requirements for all countries

Need for appropriate legislation and its efficient implementation through appropriate human and financial resources and government’s supervision allowing national animal health systems providing for:

- Appropriate surveillance, early detection, transparency, notification
- Rapid response to animal disease outbreaks
- Biosecurity measures
- Compensation
- Vaccination when appropriate
- Research

Appropriate initial and continuing veterinary education?
Key elements for efficient Veterinary Services

- Supervision of all Governments
- Building and maintaining efficient epidemiosurveillance networks and territorial meshing in the entire national territory, coordinated by an efficient national chain of command
- Alliances between public and private sectors (veterinarians, farmers)
- Use of concept and standards of ‘Quality of Services’ democratically adopted by all OIE Members, including efficient Veterinary Statutory Bodies
- Appropriate veterinary education and research
- Quality of staff including veterinarians and para-professionals. Basic requirements for curriculum?
The concept of “One World-One Health” (OWOH)

A global strategy for preventing and managing risks at the human-animal interface

Cooperation is important particularly for predictions, prevention and response
Controlling animal disease in their source must be led by public and private components of Veterinary Services.

Non-zoonotic diseases must be also considered as priorities (for food security purposes).
**NEXT STEPS**

- Improve animal health governance (legislation, budget...)
- Demonstrate economic and social justification
- More investments in Veterinary Services (in both public and private components)
- Horizontal approach (investment in peace time and in systems versus crisis treatment) like defence or firemen systems
- Crucial importance of initial and continuous training
- Research
- Cooperation with public health policy makers
• an intergovernmental organisation
  • founded in 1924 by 28 countries
  • created before the U.N.

• **World Organisation for Animal Health**

• **Organisation Mondiale de la Santé Animale**

Common name adopted by the International Committee on May 2003
175 Members (September 2009)

America: 29 – Africa: 51 – Europe: 52 – Middle-East: 13 – Asia/Pacific: 30
Resources

- Ordinary
  - 6 categories
    → allocated to standard setting

- Voluntary
  → financing of specific activities or programmes
    (Regional/ sub-Regional Representations)...

- Word for Animal Health and Welfare Fund
  → allocated for improving governance
  → relevant for veterinary education support?
The Objectives of the OIE
The OIE’s objectives

- to ensure transparency in the global animal disease and zoonosis situation
- to collect, analyse and disseminate scientific veterinary information and disease control methods
- to provide expertise and encourage international solidarity in the control of animal diseases
- to improve the legal framework and resources of national Veterinary Services (and veterinary education?)
The OIE’s objectives (contd)

within its WTO mandate, to ensure sanitary safety of the global trade of animals and animal products while avoiding sanitary barriers, by publishing health standards

- to provide a better guarantee of the safety of food of animal origin at farm level,

  **and** to promote animal welfare, through a science-based approach
OIE Information System

Promote transparency in and knowledge of global animal disease situation
Early warning

OIE Listed disease
New Disease / Infection
Immediate notification
Follow-up reports
Final report

Non OIE listed disease
Unusual epidemiological event
Emerging disease
Six-monthly report on OIE Listed disease / infection absent or present
Annual report

WAHIS Database

WAHIS – Secure Access system

T R A N S P A R E N C Y

must work in parallel with WHO-IHR Agreement
Reference Laboratories

Collaborating Centres
Reference Laboratories

- 187 Reference Laboratories
- in 36 Countries
- covering 100 diseases
World Distribution of OIE Reference Laboratories
(as of May 2008)
Reference Laboratories (contd)

Expert Centres for worldwide standardisation

- Store and distribute reference reagents
- Develop / conduct / validate diagnostic tests
- Coordinate technical and scientific studies
- Provide technical and scientific training
- Organise laboratory proficiency testing
Collaborating Centres

- 35 Collaborating Centres
- in 20 Countries
- covering 33 topics
Collaborating Centres (contd)

Expert Centres on horizontal subjects, for the OIE and Member Countries and Territories

- Assist in the elaboration of procedures to harmonise animal disease regulations / international standards
- Coordinate collaborative studies
- Provide technical training
- Organise and host scientific meetings for the OIE
Laboratory Twinning Program

Each OIE Laboratory Twinning Project...

- Is a link between OIE Reference Laboratory or Collaborating Centre (Parent) and national laboratory (Candidate)

- Aims to improve expertise and diagnostic capacity with eventual aim of reaching OIE standards - Optimal goal is to achieve OIE Reference Laboratory designation

- Should be sustainable once the project is over
Extending the network of OIE capacity, expertise and standards through Laboratory Twinning

- To provide regional support with better geographical coverage for diseases and topics that are a priority in a given region
- Improved access for more countries to high quality diagnostics and expertise
- Better scientific expertise allows members to:
  - To debate OIE scientific justification for standards on an equal footing with other Members (better representation)
  - To contribute to build a veterinary scientific community worldwide

Eligible mechanism for Veterinary Education Establishments?
The OIE-PVS Tool

Evaluation of the Performance of Veterinary Services

a tool for Good Governance of Veterinary Services

97 countries already evaluated by the OIE on a voluntary basis
OIE-PVS Assessment Procedure

- Official request from the Country *(voluntary basis)*
- Proposal of dates and PVS Expert Team trained and accredited by the OIE
- Acceptance by the Country
- Preparation of the mission between country and Team Leader
- PVS Mission / visit to the country / Peer review
- Dialogue and report release
PVS Evaluations and PVS Gap Analysis

- PVS and PVS Gap Analysis Trainings
- PVS evaluation of performance of Veterinary Services (using the OIE-PVS Tool)
- PVS Gap Analysis
- PVS follow-up missions
Example

PVS – Chapter II – Technical Authority and Capability

- 4 Fundamental Components – 40 Critical competencies, of which:
- The authority and capability of the VS to develop and apply sanitary measures and science-based procedures supporting those measures
  - Section II-1 Veterinary laboratory diagnosis
  - Section II-2 Laboratory quality assurance
  - Section II-3 Risk analysis
  - Section II-4 Quarantine and border security
  - Section II-5 Epidemiological surveillance
  - Section II-6 Early detection and emergency response
  - Section II-7 Disease prevention, control and eradication
PVS Gap Analysis process

Qualitative evaluation of the performance on 40 critical competencies

Specific Objectives of the Country

Prioritization of the critical competencies and of related needs

Could be adapted for veterinary education!
PVS Gap Analysis process

- Gap identification and **PVS Gap Analysis**
  - National use for self improvement and national budget applications (Ministry of Finance; Parliament)
  - External use for financial support (Donor investment programs), if needed

- **PVS Gap Analysis field visits**
  - Dialogue with the country
  - Country appropriation/internal consultations
  - Validation of choices and priorities with the country concerned

- **Eligible for veterinary education?**
# Global Programme

## State of play PVS – 21 September 2009

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<th>OIE Regions</th>
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<th>PVS Requests received</th>
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OIE-PVS missions: Countries

- **Africa:** Algeria, Benin, Burkina Faso, Burundi, Cameroon, Chad, Côte d’Ivoire, DR Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia and Zimbabwe.

- **Americas:** Barbados, Belize, Bolivia, Brazil, Colombia, Costa Rica, Dominican Rep., El Salvador, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru and Uruguay.

- **Asia & Pacific:** Bangladesh, Bhutan, Brunei, Cambodia, Fiji Island, Indonesia, DPR Korea, Laos, Mongolia, Myanmar, Nepal, Philippines, Sri Lanka and Vietnam.

- **Europe:** Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Romania, Tajikistan, Turkey, Ukraine and Uzbekistan.

- **Middle East:** Afghanistan, Bahrain, Jordan, Kuwait, Lebanon, Oman, Palestinian A.T., Qatar, Saudi Arabia, Syria, United Arab Emirates and Yemen.
OIE-PVS missions Map

- Yellow: Official requests
- Light green: Missions completed
- Dark green: Report’s confidentiality lifted
## Global Programme

### State of play Gap Analysis – 21 September 2009

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**Gap Analysis missions: Countries**

- **Africa:** Benin, Burkina Faso, DR Congo, Djibouti, Egypt, Gabon, Ghana, Guinea, Guinea-Bissau, Lesotho, Madagascar, Mali, Mauritius, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Tanzania, Togo, Uganda and Zambia.
- **Americas:** Barbados, Belize, Costa Rica and Honduras.
- **Asia & Pacific:** Bhutan, Brunei, Cambodia, DPR Korea, Philippines and Sri Lanka.
- **Europe:** Armenia, Kyrgyzstan and Turkey.
- **Middle East:** Kuwait and Lebanon.
Veterinary Education

✓ Appropriate initial and continuous Veterinary Education is a key tool for global governance.

✓ The current quality of veterinary education is not acceptable in many countries. It is a risk for everybody.
Veterinary Education (contd)

Need for:

- Minimum requirements on curriculum
- Involvement of Veterinary statutory body
- Public and private resources
- International donors
- Cooperation tools. Twinnings
- Transboundary movements
Thank you for your attention