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OIE Sub-Regional Representation in Brussels



Prevention and Control of Animal Diseases

**The BWC and Global Health
Oslo, Norway, 18-19 June 2009**



- An intergovernmental Organisation
- Founded in 1924 by 28 countries
- Predates the U.N.



World Organisation for Animal Health

Common name adopted by the International Committee on May 2003



MEMBERS



174 Members (June 2009)

Americas : 29 – Africa : 51 – Europe: 53 – Middle-East : 13 – Asia: 28



OBJECTIVES

General objective : IMPROVE ANIMAL HEALTH WORLDWIDE

1. To ensure transparency on the global animal disease and zoonosis situation
2. To collect, analyse and disseminate veterinary scientific information
3. To provide expertise and encourage international solidarity in the control of animal diseases
4. Within its mandate under the WTO SPS Agreement, to safeguard world trade by publishing sanitary standards for international trade in animals and animal products
5. To improve the legal framework and resources of national Veterinary Services
6. To better guarantee the safety of food of animal origin and to promote animal welfare through a science-based approach

REGIONAL REPRESENTATIONS

Africa

Bamako, Mali

*Gaborone, Botswana
Tunis, Tunisia (2008)*

Americas

Buenos Aires, Argentina

Panama City, Panama

Asia, Far East and Oceania

Tokyo, Japan

Regional coordination Unit for the Southeast Asia
FMD Campaign



*Bangkok, Thailand
Beijing, China?*

Europe

Sofia, Bulgaria

Brussels, Belgium

Middle East

Beyrouth, Lebanon

PARTNERS

- World Trade Organization – WTO
- United Nations:
 - FAO – WHO
 - Codex Alimentarius, IPPC
- World Bank
- Regional Organizations (economical/scientific/professional organisations)
- ...

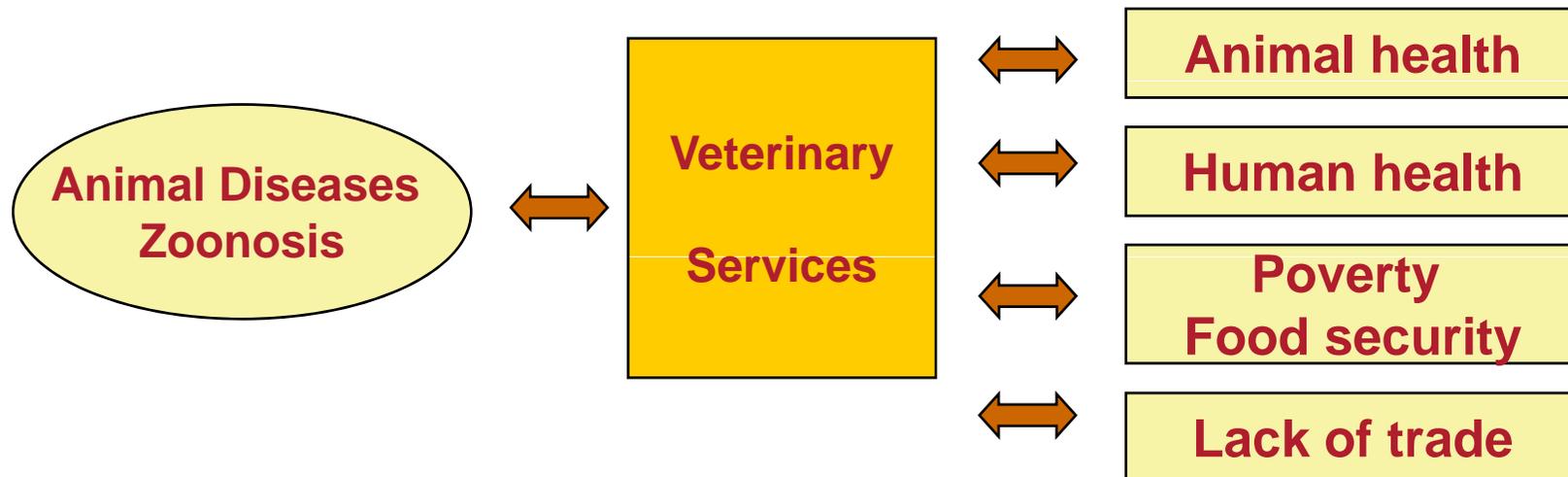
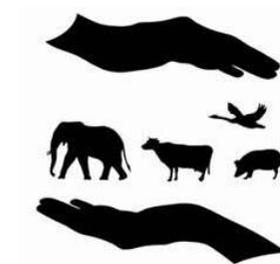
At present : around 40 agreements

Why are we worried about the prevention and control of major animal diseases and zoonosis?



GLOBAL PUBLIC GOOD CONCEPT

Animal health systems are a
Global Public Good



GLOBAL PUBLIC GOOD CONCEPT

- In the case of control and eradication of infectious diseases, the benefits are international and inter-generational in scope.
- **Countries depend on each other :**
 - Inadequate action by a single country can jeopardize others
 - Failure of one country may endanger the planet.

IMPACT OF ANIMAL DISEASES

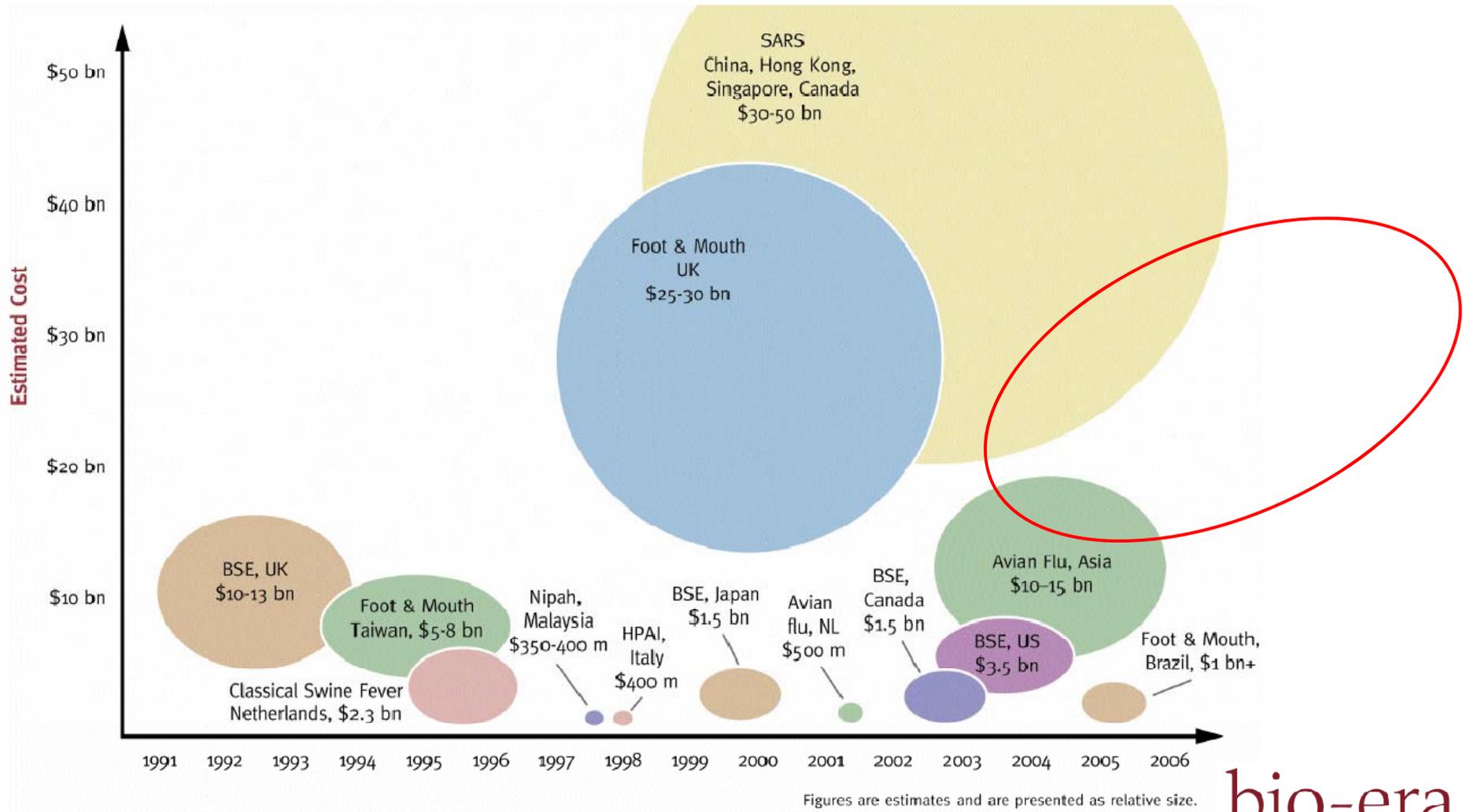
High economic and social negative consequences

- Public Health
 - Zoonoses (rabies, AI, tub., bruc., anthrax..)
 - Food safety : foodborne diseases
- Food security (production/Food supply chain)
- Market access
- Increase of poverty (DC, TC)



ECONOMIC IMPACT

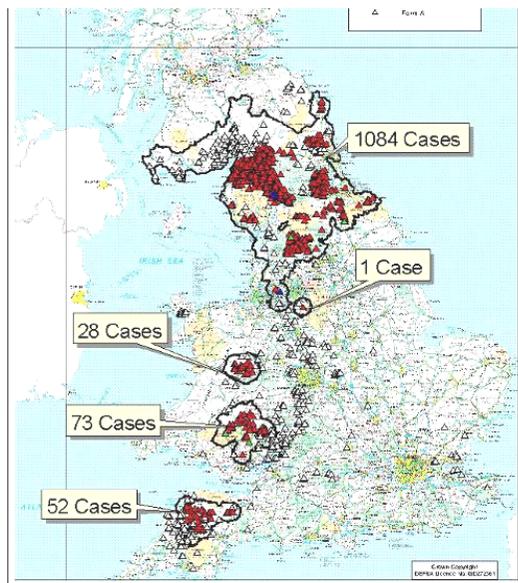
FIGURE 1: Economic Impact of Selected Infectious Diseases: Recent Livestock Disease Outbreaks and SARS



EXAMPLE OF FMD

Economic impact of Foot and Mouth Disease outbreaks in 2001 in UK:

- **direct** economic effects on agriculture, the food industry and the public sector : estimated at **£3.1 billion**
- direct costs to tourism, as a loss of expenditure : **£2.7/£3.2 billion**
- **indirect costs** to industries that supply agriculture, the food industries and tourist related business were estimated at **£1.9 to £2.3 billion**



(Source : Defra)

PUBLIC HEALTH IMPACT

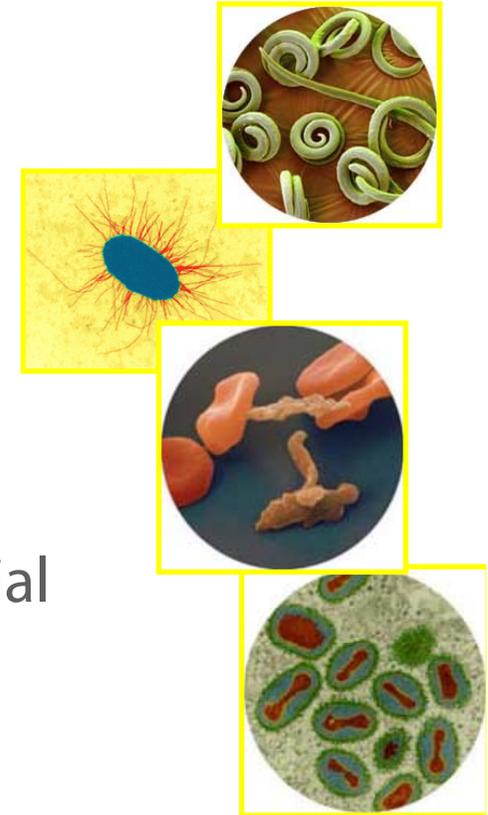


about...

💣 ...60% of human pathogens are zoonotic

💣 ...75% of emerging diseases are zoonotic

💣 ...80% of pathogenic agents having a potential bioterrorist use are zoonotic



Definition of Zoonosis (OIE Terrestrial Code) :
means any disease or infection which is naturally transmissible from animals to humans.

INTERNATIONAL MOVEMENTS



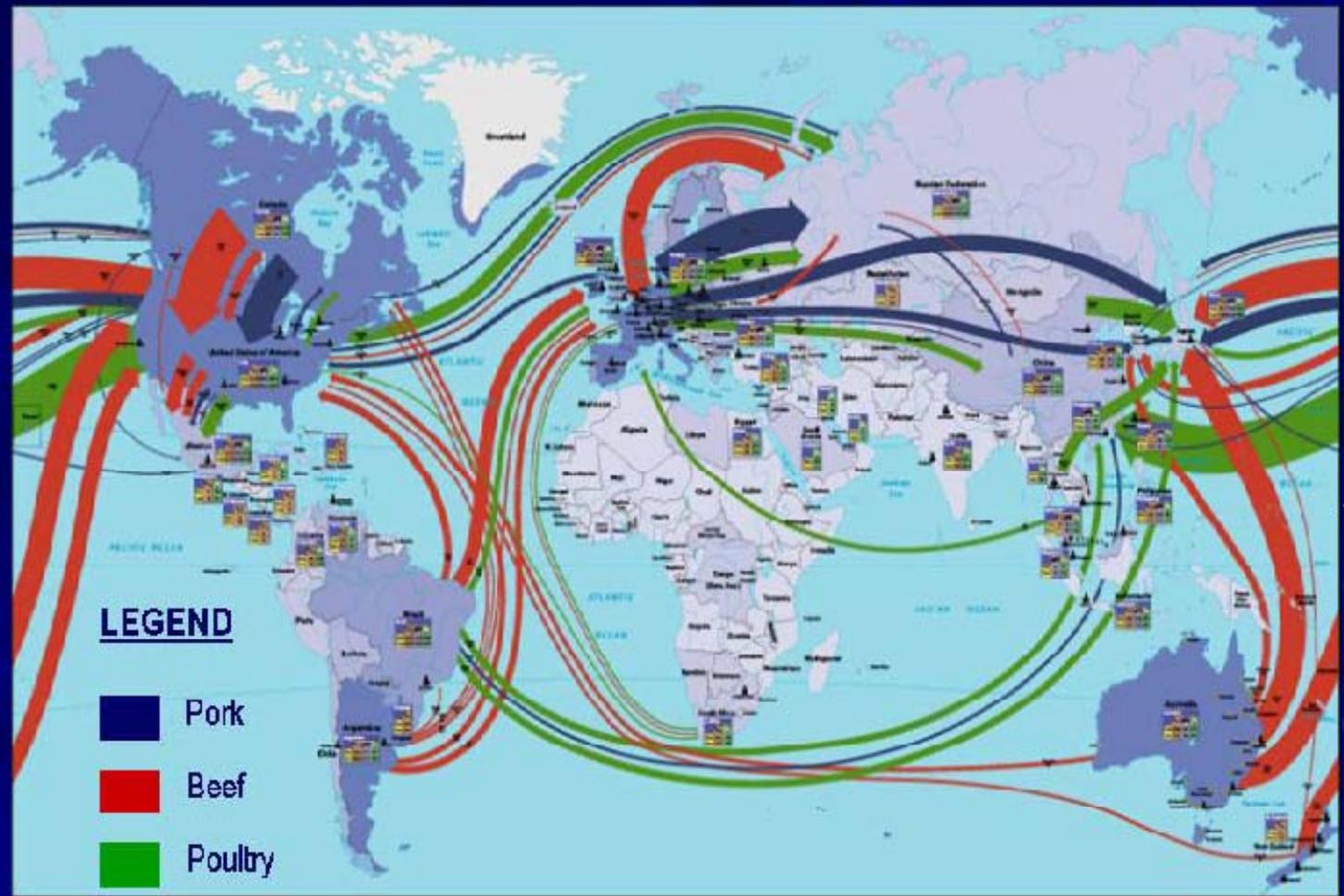
“There is no where in the world from which we are remote and no one from whom we are disconnected”



PNAS, 2004

INTERNATIONAL MOVEMENTS

Global Meat Trade is Highly Concentrated



CAUSES OF INFECTION

- **Incidental**
‘Normal’/expected

- **External**
Uncontrolled/difficult to control
 - Wild animals, migratory birds
 - Illegal trade

- **Deliberate spread**
Agroterrorism



BIOTERRORISM / WARFARE

- No bioterrorist use of animal pathogens documented so far
- Thin history of using biological warfare:
 - German use of glanders against Allied horses (WW I)
 - Japanese use of *Yersinia pestis* in China (WW II)
 - Soviet use of tularemia and glanders in Afghanistan
- Intentional contamination of food
 - Salmonella attack in Oregon in 1984 => 751 cases
- Anthrax letters in USA, 2001 => 22 cases, 5 deaths
- Hoax letter in NZ in 2005
 - Sent to a newspaper claiming FMD virus released

What is needed to prevent and control animal diseases?

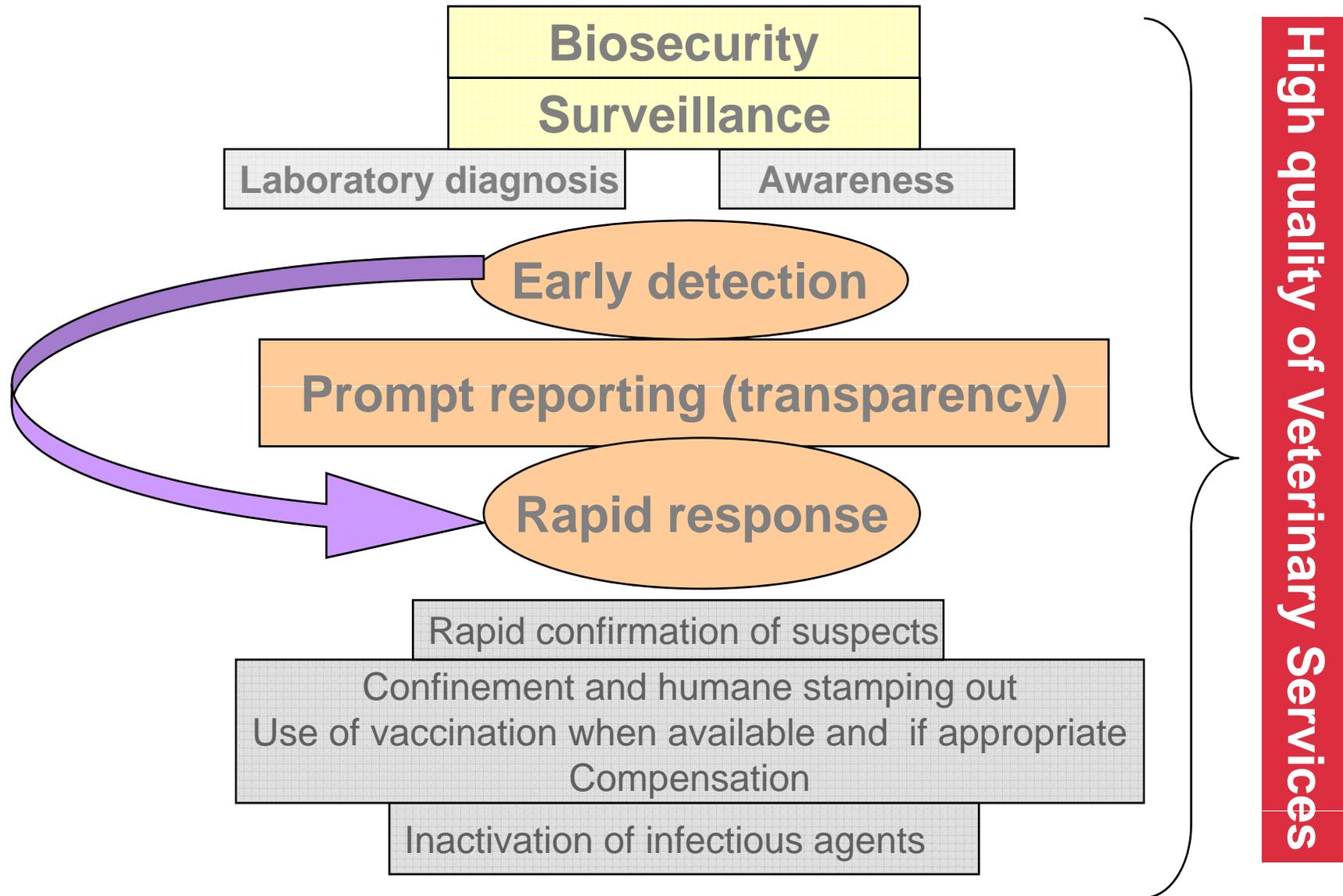


CONTROLLING ANIMAL DISEASES

⇒ Mechanisms to control infectious animal diseases, whether occurring naturally or deliberately, remain identical.

⇒ « It is the efficiency with which we plan for and confront traditional and emerging diseases that will predict our ability and confidence in tackling intentional outbreaks, if, when, and where they OCCUR ». (Martin Hugh-Jones; Sc.Tech.Rev. OIE 2006)

KEY ELEMENTS



GOOD GOVERNANCE

⇒ Appropriate **organisation** (chain of command), **human and financial resources**, and **legislation**

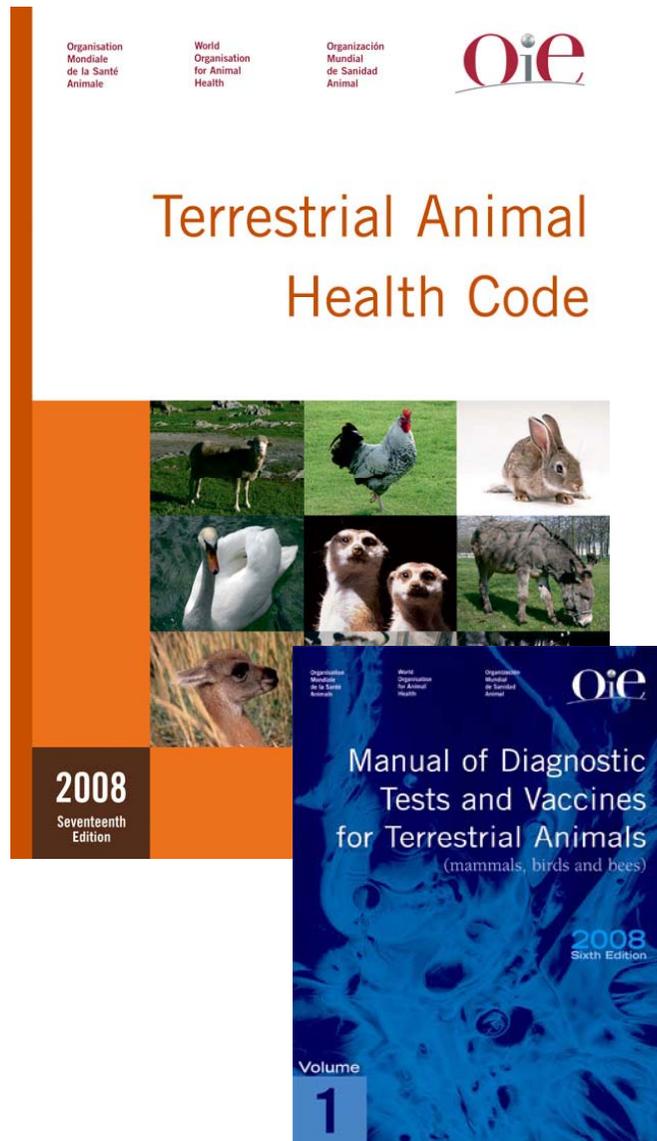
⇒ Efficient (epidemiology) **surveillance networks** and **territorial meshing** covering the entire national territory

⇒ **Compensation** mechanisms

⇒ Strong **collaboration** with other competent authorities (essential for response capacity : police, military, local authorities..)

⇒ **Preparedness** (emergency plans, simulation exercises)

OIE STANDARDS



- Quality and evaluation of VS
- Listed diseases and procedures for notification
- Requirements for surveillance
- Requirements to define free status
- Conditions for safe importation
- Inactivation of pathogens
- Regionalisation/compartmentalisation
- Biosecurity
- ...
- Reference tests for diagnosis
- Production & control of vaccines

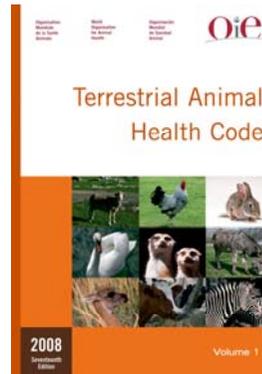
OIE LISTED DISEASES

Article 1.2.3.

The following *diseases* are included in the OIE List.

1. The following *diseases* are included within the category of multiple species *diseases*:

- Anthrax
- Anjeszky's disease
- Bluetongue
- Brucellosis (*Brucella abortus*)
- Brucellosis (*Brucella melitensis*)
- Brucellosis (*Brucella suis*)
- Crimean Congo haemorrhagic fever
- Echinococcosis/hydatidosis
- Epizootic haemorrhagic disease
- Equine encephalomyelitis (Eastern)
- Foot and mouth disease
- Heartwater



In 2008 : 93 diseases

26 multi species, 14 cattle,
11 sheep/goat, 11 equine,
7 swine, 14 avian, 2 lagomorph,
6 bee, 2 others

CHAPTER 1.2.3.

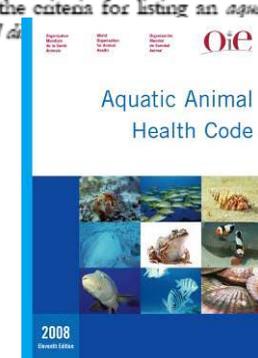
DISEASES LISTED BY THE OIE

Preamble: The following *diseases* are listed by the OIE according to the criteria for listing an *aquatic animal disease* (see Article 1.2.2.1.) or criteria for listing an *emerging aquatic animal disease*.

Article 1.2.3.1.

The following *diseases* of fish are listed by the OIE:

- Epizootic haematopoietic necrosis
- Infectious haematopoietic necrosis
- Spring viraemia of carp
- Viral haemorrhagic septicaemia
- Infectious salmon anaemia
- Epizootic ulcerative syndrome
- Gyrodactylosis (*Gyrodactylus salaridis*)
- Red sea bream iridoviral disease
- Koi herpesvirus disease.



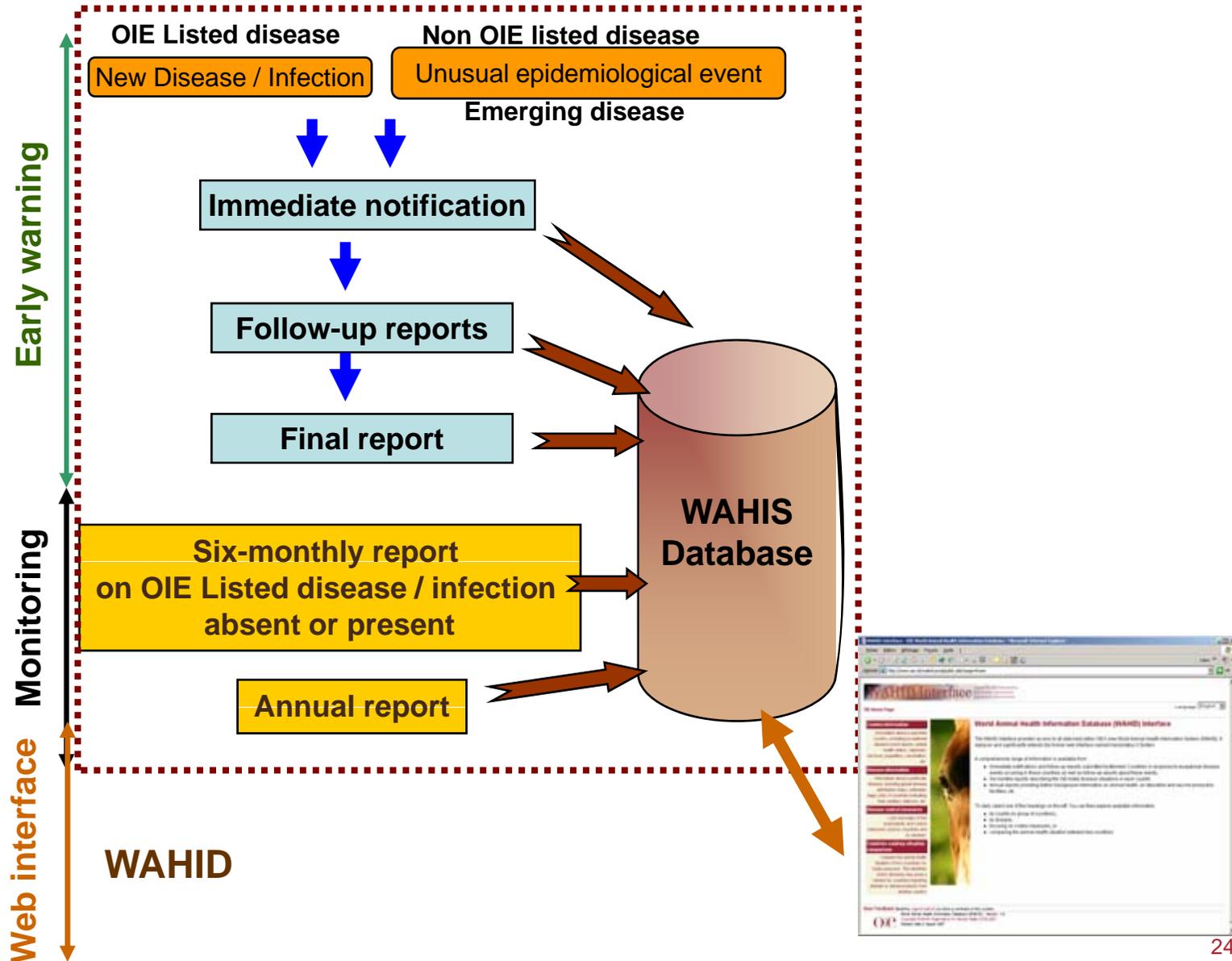
In 2008 : 30 diseases

9 fish, 7, molluscs,
12 crustaceans, 2 amphibians

The following *diseases* of molluscs are listed by the OIE:

- Infection with *Bonamia ostreae*
- Infection with *Bonamia exitiosa*
- Infection with *Marteilia refringens*
- Infection with *Perkinsus marinus*
- Infection with *Perkinsus olseni*
- Infection with *Xenobolus californiensis*

REPORTING TO THE OIE



Country information

Disease information

Immediate notifications and Follow-ups

Weekly Disease Information

Report archive

Disease outbreak maps

Disease distribution maps

Detailed country (ies) disease incidence

Lists of countries by sanitary situation

Disease timelines

General Disease Information

Disease control measures

Countries sanitary situation comparison

Data between 1996 and 2004

WAHID home page



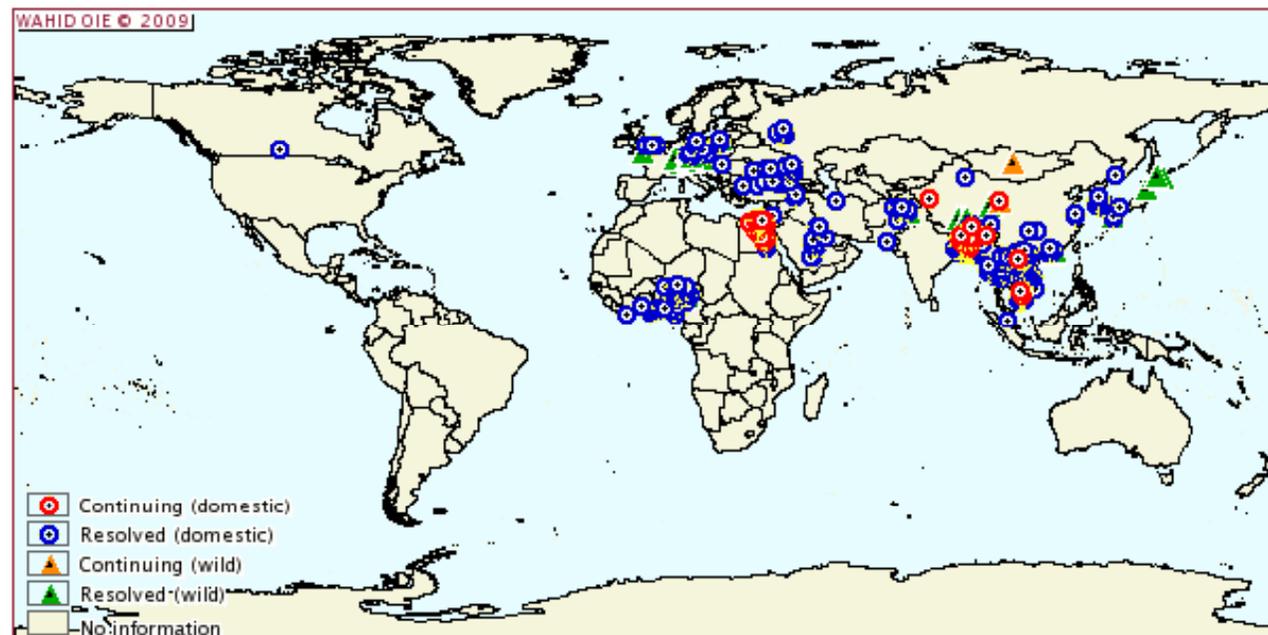
Choose Disease: Terrestrial:

Aquatic:

choose_species:

Period: From: To:

Disease outbreak maps



World animal health situation

- The OIE
- The Veterinary Services
- Press releases/Editorials
- International meetings
- **World animal health situation**
 - OIE Mandate
 - WAHID (>2004)
 - Information (<2005)
 - Bov. spongif. encephalopathy
 - National Disease Contingency Plans
 - Simulation exercises
 - Active search
 - OIE-info distribution list
- Official country disease status
- Animal diseases data
- OIE Expertise
- Certification of diagnostic assays
- Health standards
- Publications and Documentation
- Jobs/Internships/Services
- Links

Disease introduction simulation exercises

This page is used to disseminate on the OIE web Site information received from Members on disease introduction simulation exercises taken place in 2008.

These exercises are sent through the [OIE-Info Distribution List](#) before their implementation.

- [- 2002 -](#)
[- 2003 -](#)
[- 2004 -](#)
[- 2005 -](#)
[- 2006 -](#)
[- 2007 -](#)
[- 2008 -](#)
[- 2009 -](#)

Location	Disease	Date
United States of America	Rift Valley fever	18 to 20 November 2008
Australia	Classical swine fever	18 to 20 November 2008
Serbia	Avian influenza	10 to 15 November 2008
Australia	Avian influenza	11 and 12 November 2008
Turkey	Highly pathogenic avian influenza	3 to 7 November 2008
Australia	Foot and mouth disease	29 and 30 October 2008
Australia	Swine disease	21 and 22 October 2008
Chile	Avian influenza	14 to 16 October 2008
Spain	Foot and mouth disease	16 and 17 June 2008
Panama	Foot and mouth disease	16 to 20 June 2008
Nordic-Baltic countries	Bluetongue	13 to 16 May 2008
Denmark	Classical swine fever	13 to 16 May 2008
Jamaica	Highly pathogenic avian influenza	30 April to 1 May 2008
Luxembourg	Foot and mouth disease	3 to 7 March 2008
Peru	Avian influenza	20 and 21 February 2008
Paraguay	Foot and mouth disease	25 to 29 February 2008
Albania	Highly pathogenic avian influenza	30 and 31 January 2008

Answers :

International cooperation, Capacity building activities



NEEDS PRESENTED

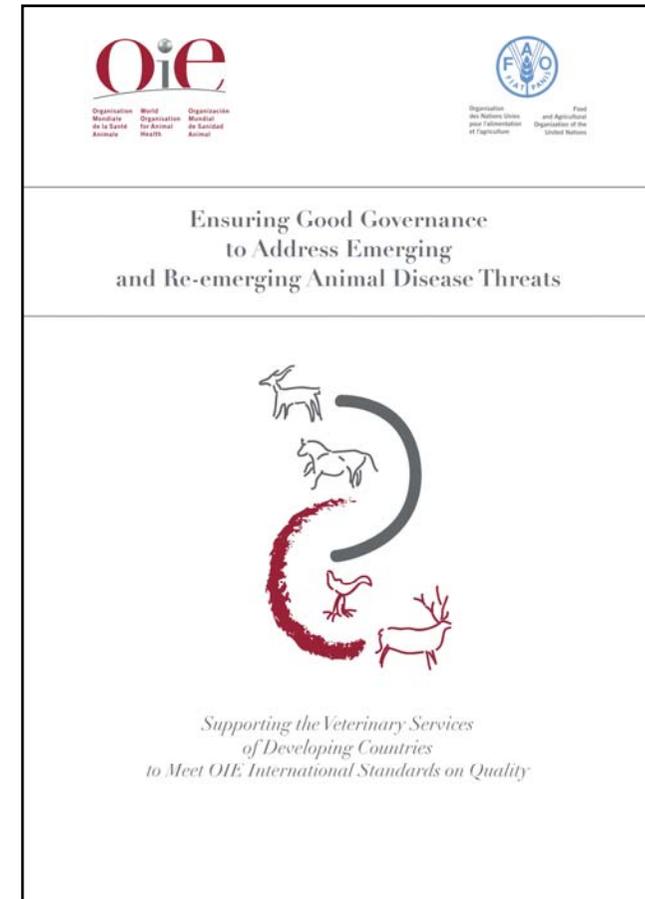


OIE/FAO programme on Good Governance *(last updated in Sept. 2007)*

Presented and endorsed at the :

-International conferences on avian influenza
in Geneva in 2005, in Beijing in 2006

-OIE/World Bank/FAO/UN conference on
« Global Animal Health Initiative: the Way
Forward » in Washington (Oct 2007)



http://www.oie.int/downld/Good_Governance07/Good_vet_governance.pdf

THE WORLD ANIMAL HEALTH AND WELFARE FUND

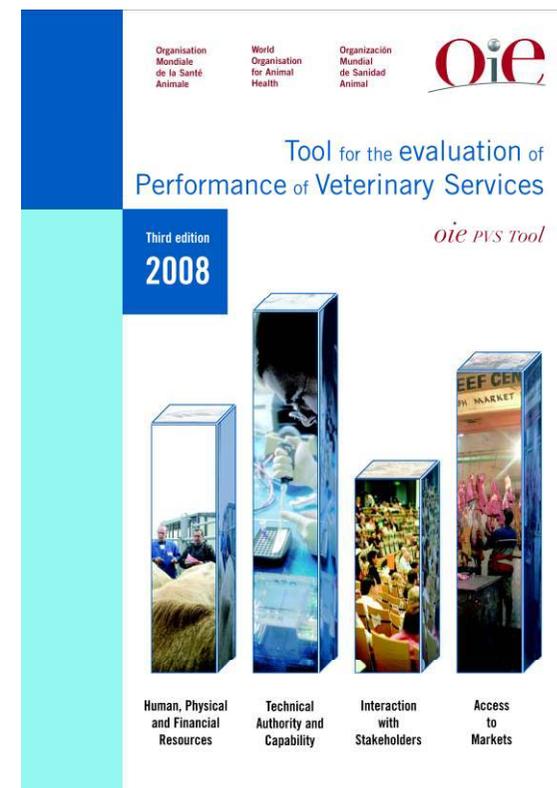
- Created on 28 May 2004 by Resolution No. XVII of the OIE International Committee
- Established “for the purpose of projects of international public utility relating to the control of animal diseases, including those affecting humans and the promotion of animal welfare and animal production food safety”
- Advisory Committee chaired by the representative of the World Bank
- Participants (incl. Donors from Europe Region):
 - International Organizations: WTO, WHO, FAO and OIE
 - Key Donors: World Bank; European Commission; USA (USDA); UK; Japan; France, Canada (CIDA) Australia (AusAID)
 - Observer: Switzerland and the private sector (SSAFE Initiative)

EVALUATION OF VETERINARY SERVICES



OIE-PVS TOOL : OIE Tool for the Evaluation of Performance of VS

- ⇒ Aim: assess the level of compliance with OIE standards (qualitative assessment)
- ⇒ Voluntary process: country's request
- ⇒ Mission carried out by OIE trained experts
- ⇒ Report released upon agreement of the country



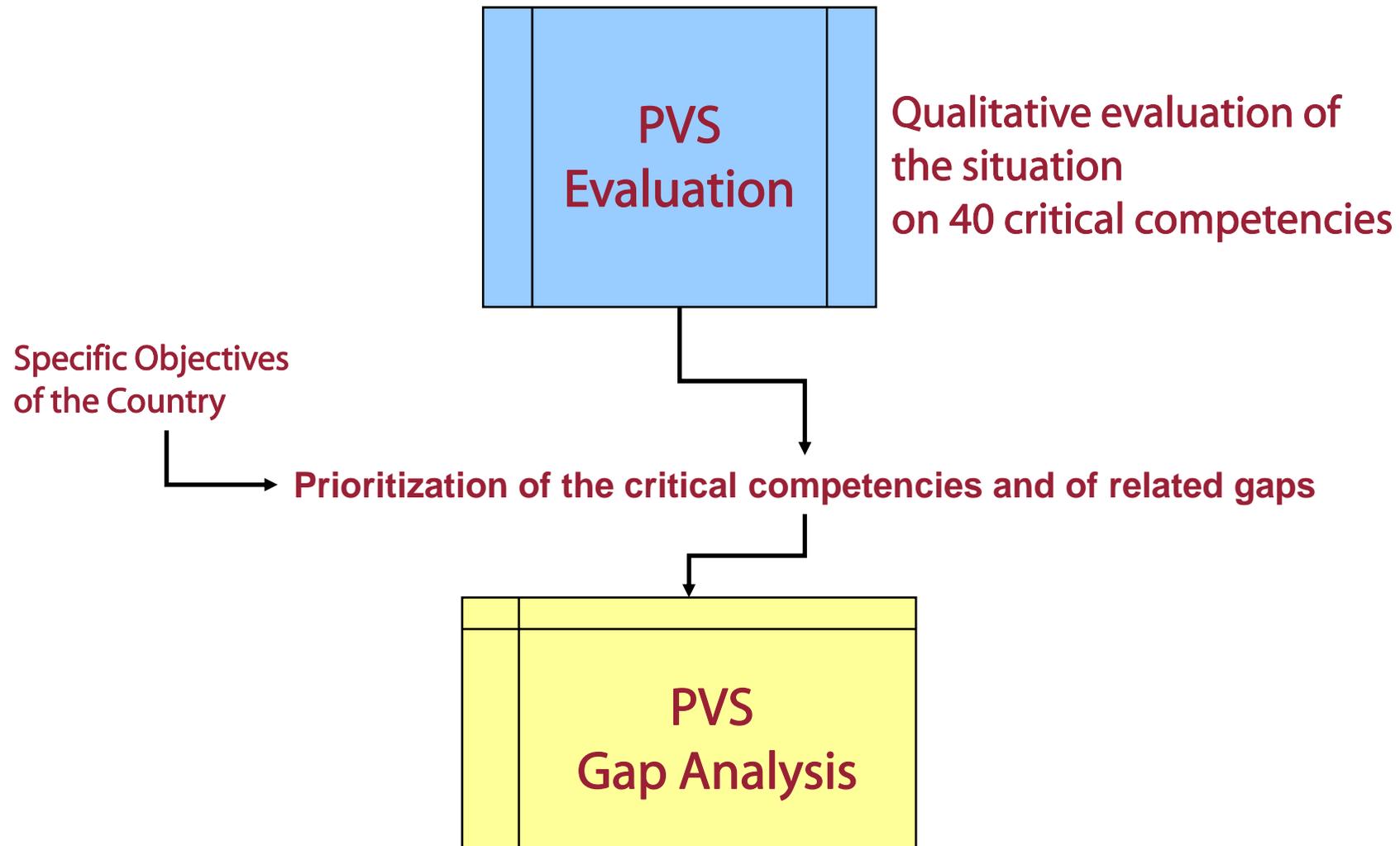
http://www.oie.int/eng/oie/organisation/EN_OIE%20PVS%20Tool_2008.pdf

PVS Evaluations - State of play (May09)

OIE Regions	OIE Members	Country Requests received	PVS Missions done	Draft Reports received	Reports available (to Donors & Partners)
Africa	51	40	36	35	25
Americas	29	17	16	14	5
Asia & Pacific	29	13	12	12	5
Europe	52	12	12	10	3
Middle East	13	12	8	7	2
Total	174	94	84	78	40

PVS GAP ANALYSIS PROCESS

- Shift from a qualitative evaluation to a quantitative assessment of needs and priorities
- Identification of the gaps + Definition of needed activities to correct the gaps + Prioritization of the activities to be undertaken + Quantification of needed means
- National choices (organization of public veterinary services; sub-sector priorities) and development strategy for the livestock sector



LABORATORY TWINNINGS



Need for better access to scientific expertise for negotiations, certifications, justification of standard setting)

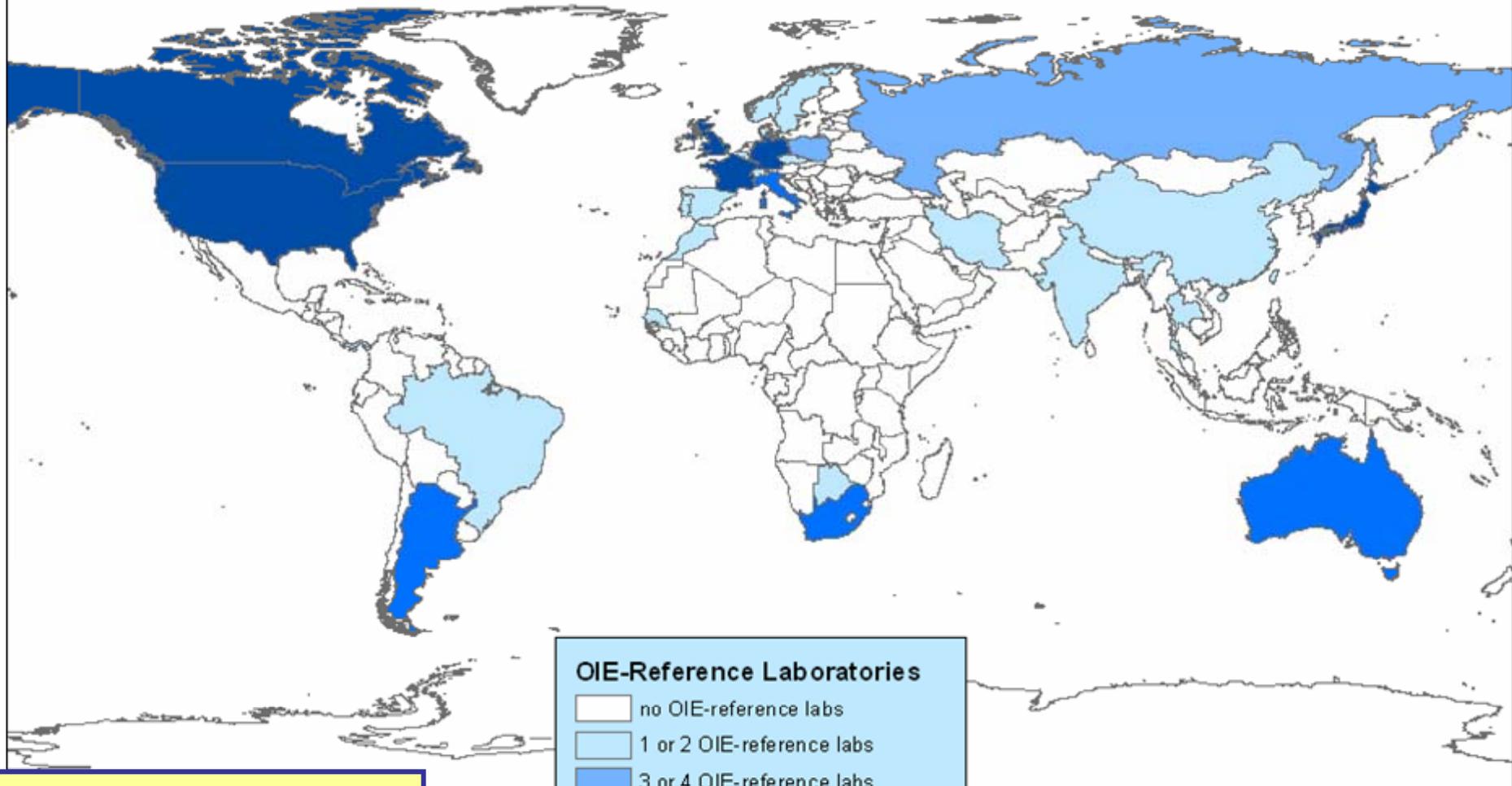
⇒ Increasing lab. capacities (expertise and diagnostic) and improve geographical coverage

⇒ Projects between parent (OIE Reference Laboratory) and candidate labs (average 2 years)

⇒ 13 ongoing – 5 in the pipe



World Distribution of the OIE-Reference Laboratories



- ✓ 177 OIE Ref. Labs.,
- ✓ 32 Countries,
- ✓ 95 Diseases,
- ✓ 154 experts

OIE-Reference Laboratories

- no OIE-reference labs
- 1 or 2 OIE-reference labs
- 3 or 4 OIE-reference labs
- 5 to 10 OIE-reference labs
- more than 11 OIE-reference labs

List of OIE Reference Laboratories (2008);
http://www.oie.int/eng/OIE/organisation/en_listeLR.htm

VACCINE BANKS



Developed for AI by OIE
Concept to be extended to other
disease

=> Emergency supply of quality
vaccines

CAPACITY BUILDING ACTIVITIES

- Coordination with FAO through Regional OIE/FAO Animal Health Centres
 - ⇒ OIE : Regional workshops and training seminars / good governance of veterinary services (OIE national delegates and focal points) + Support to national (regional) legislation projects
 - ⇒ FAO : support to develop surveillance and control programmes for major epizootic diseases

INTERNATIONAL COOPERATION



FAO/OIE

GF-TADs

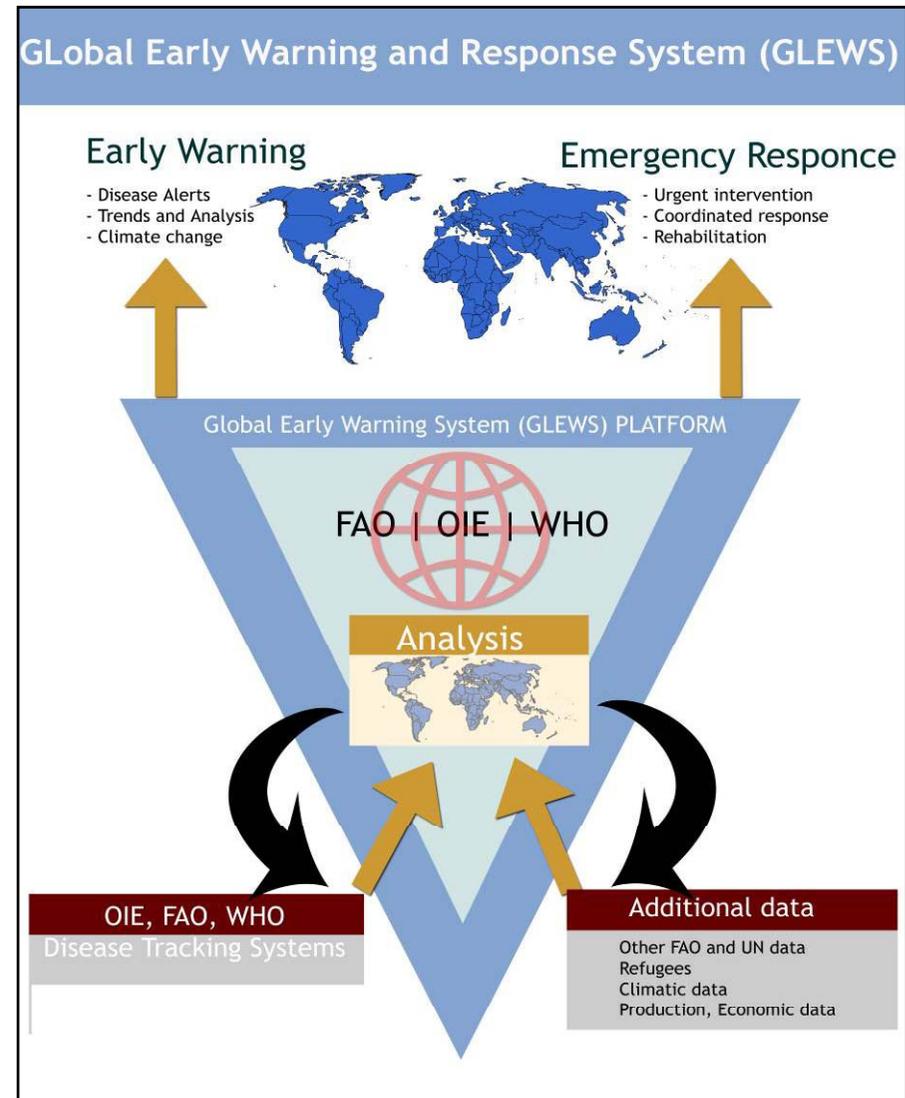
GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES

- Strengthening Veterinary Services
- Paradigm shift in disease control by sound epidemiological knowledge
- Progressive control of disease

INTERNATIONAL COOPERATION

GLEWS : OIE/FAO/WHO

- Sharing information
 - Disease tracking
 - Epidemiological analysis
- ⇒ Assistance to predict and prevent livestock animal diseases / zoonoses threats
- ⇒ Design of control strategies
- ⇒ Coordinated response



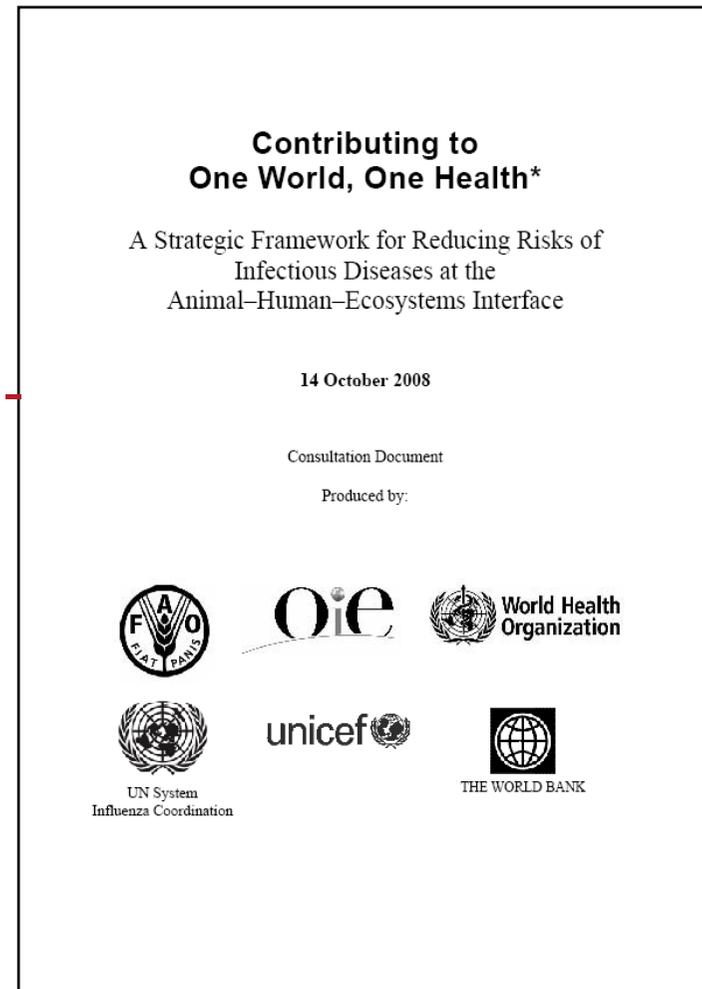
INTERNATIONAL COOPERATION

Engagement on the concept of OWOH

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

Our global partners:

- FAO
- WHO
- UNICEF
- World Bank
- UNSIC

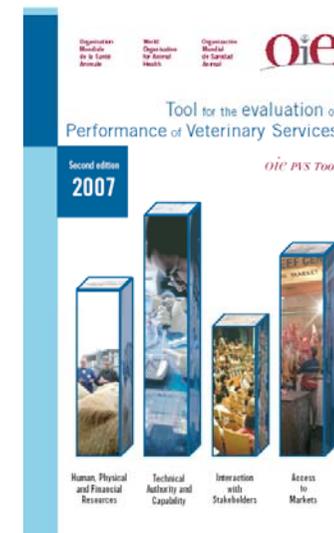
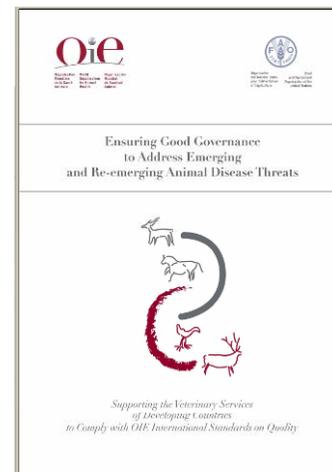
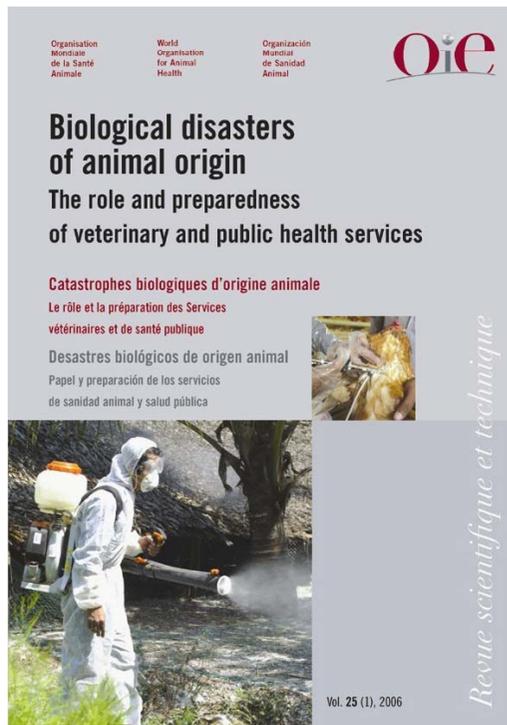
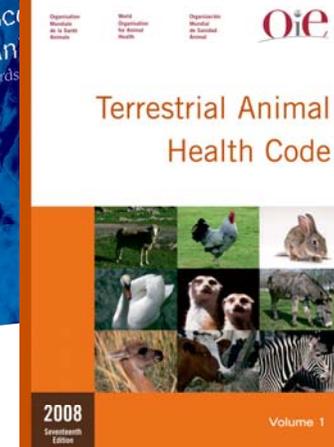
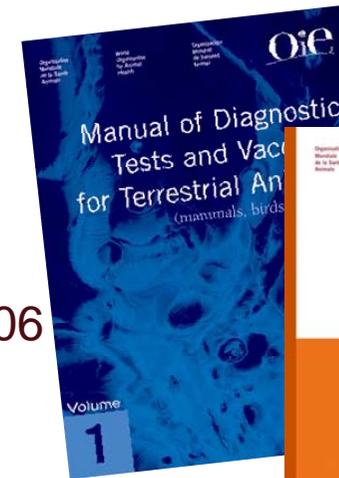


PUBLICATION & WEBSITE



- OIE Standards
- Sanitary information
- Good governance/PVS document...
- Scientific and Technical Review, April 2006

=> www.oie.int



Thank you for your attention 



Organisation mondiale
de la santé animale

World Organisation
for Animal Health

Organización Mundial
de Sanidad Animal