

Dr. Monique ELOIT
Deputy Director-General
World Organisation for Animal Health

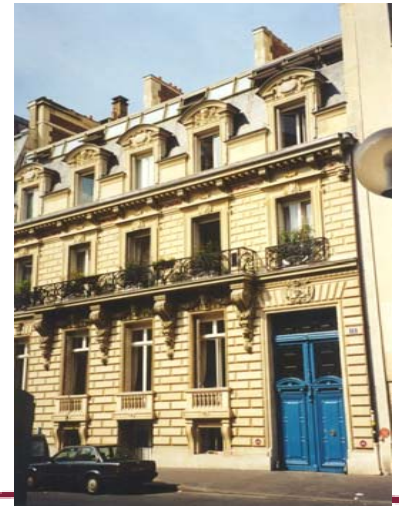
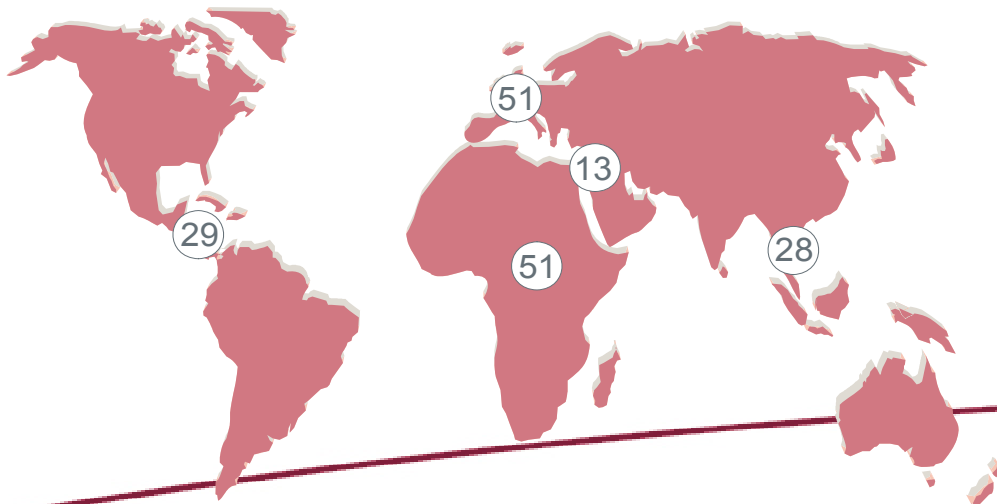


International Animal Disease Surveillance

SOME KEY FACTS

- Established in 1924 – fear of animal panzootic in Europe - Rinderpest
- Intergovernmental organisation – not UN based
- Objectives:
 - ensure transparency in the global animal disease and zoonoses situation
 - provide expertise/encourage solidarity in the control of animal diseases
 - improve the legal framework and resources of Veterinary Services
 - safeguard global trade by establishing international health standards
 - provide a better guarantee of the safety of food of animal origin
 - Promote animal welfare through a science based approach

• **175 Members as of 2009**



Animal Disease Surveillance Objectives

The type of surveillance applied depends on the desired outputs needed to support decision-making

- **To provide data** for use in risk analysis (national level – international trade)
- **To detect early → rapid action**
- **To demonstrate the sanitary status**
- **To be transparent → notification**

Criteria for listing a disease

INTERNATIONAL SPREAD?

- Has international spread been proven on **3 or more** occasions? **OR**
- Are **more than 3 countries** with populations of susceptible animals free of the disease or facing impending freedom (based on Code provisions, especially Appendix 3.8.1)? **OR**
- Do OIE annual reports indicate that at least 3 countries with susceptible populations are reporting absence of the disease?

NO

YES

EMERGING?

- (A newly recognised pathogen or known pathogen behaving differently)
- Is there apparent zoonotic properties or rapid spread?

ZOONOTIC POTENTIAL?

- Has transmission to humans been proven? (with the exception of artificial circumstances) **AND**
- Is human infection associated with severe consequences? (death or prolonged illness)

YES

NO

SIGNIFICANT SPREAD IN NAIVE POPULATIONS?

- Does the disease exhibit significant mortality at level of a country or zone? **OR**
- Does the disease exhibit significant morbidity at the level of a country or zone?

NO

YES

EXCLUDE

INCLUDE

EXCLUDE

INCLUDE

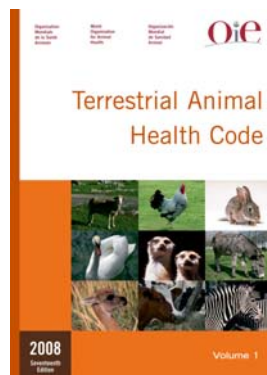
OIE's list of diseases

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 2009 : 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.

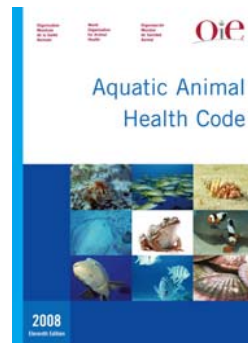
DISEASES LISTED BY THE OIE

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* (see Article 1.2.2.2.).

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 salaris*)
- Red sea bream iridoviral disease
- Koi herpesvirus disease.



In 2009 : 27 diseases

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

WHAT DOES NOTIFICATION MEAN?

Means the procedure by which:

- the **Veterinary Administration** informs **OIE Headquarters**
- **OIE Headquarters** informs **Veterinary Administrations**.

of the occurrence of a disease outbreak of or any other epidemiological event,

- according to the provisions of the OIE's *Codes*



Notification procedures

Types of reports

Immediate notification of disease, infection or unusual epidemiological events

Weekly reports: Follow-up to the immediate notification

Final report:

- if the outbreaks have ended (event closed)
- if the situation becomes endemic

Six-monthly report (qualitative + quantitative info)

Annual report

Immediate notification



What needs immediate notification
- within 24 hours

- 1 - The **first occurrence** of a listed **disease or infection** in a country or zone/compartment
- 2 - The **re-occurrence** of a listed **disease or infection** in a country or zone/ compartment following a report declaring previous outbreak(s) eradicated
- 3 - The first occurrence of a **new strain** of a pathogen of a listed disease in a country or zone/compartment

Immediate notification

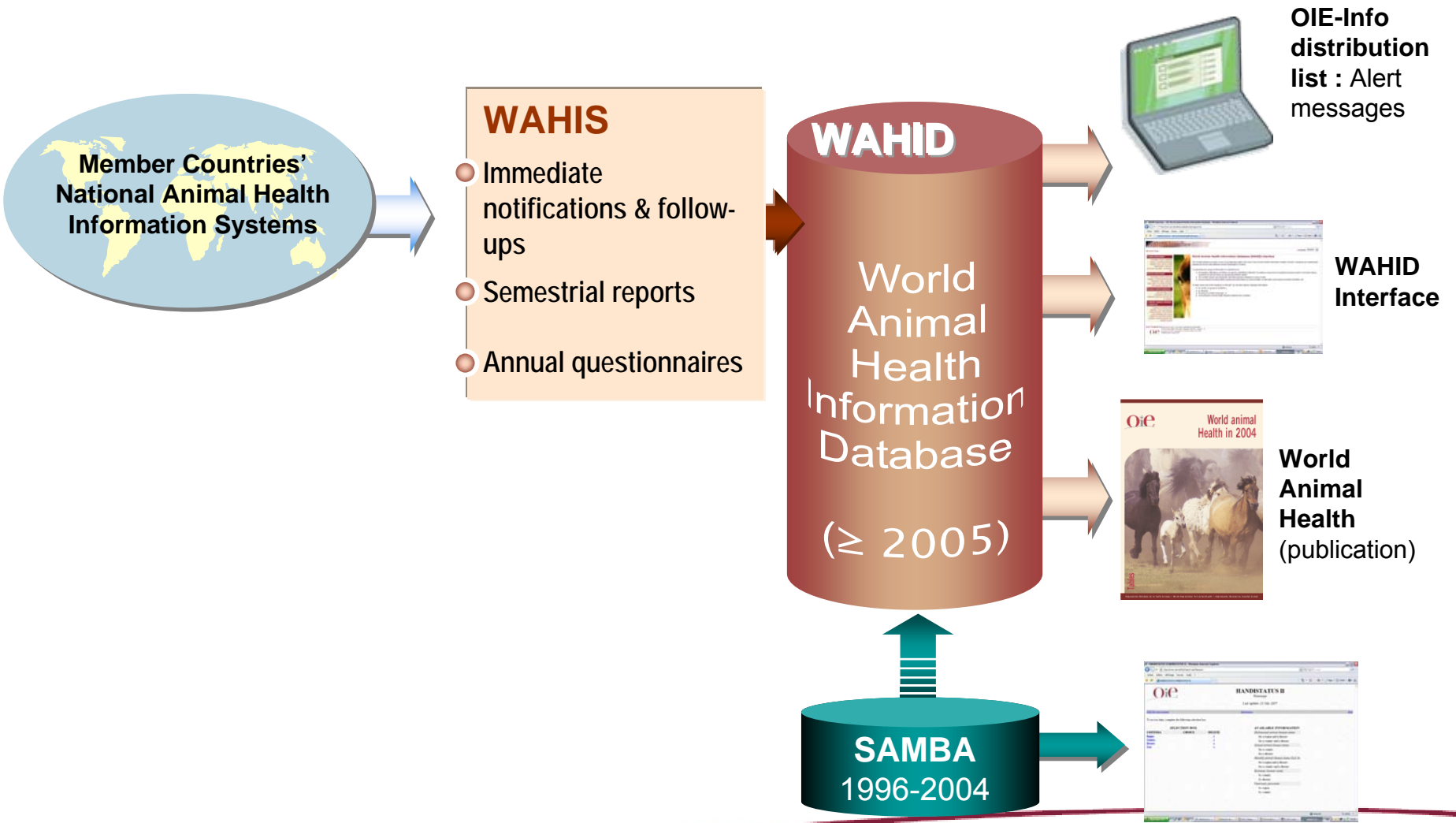


4 - A sudden and unexpected increase in morbidity or mortality caused by an existing listed disease

5 - Evidence of change in the epidemiology of a listed disease (e.g. **host range, pathogenicity, strain** of causative pathogen), in particular if there is a zoonotic impact.

6 - An emerging [non listed] disease with significant morbidity / mortality or zoonotic potential

The OIE's World Animal Health Information System

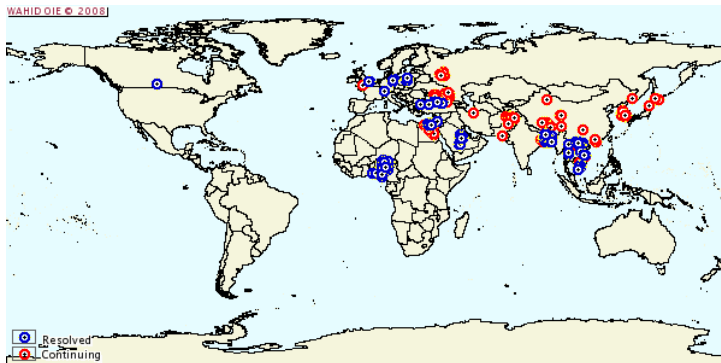


Handistatus II
1996-2004

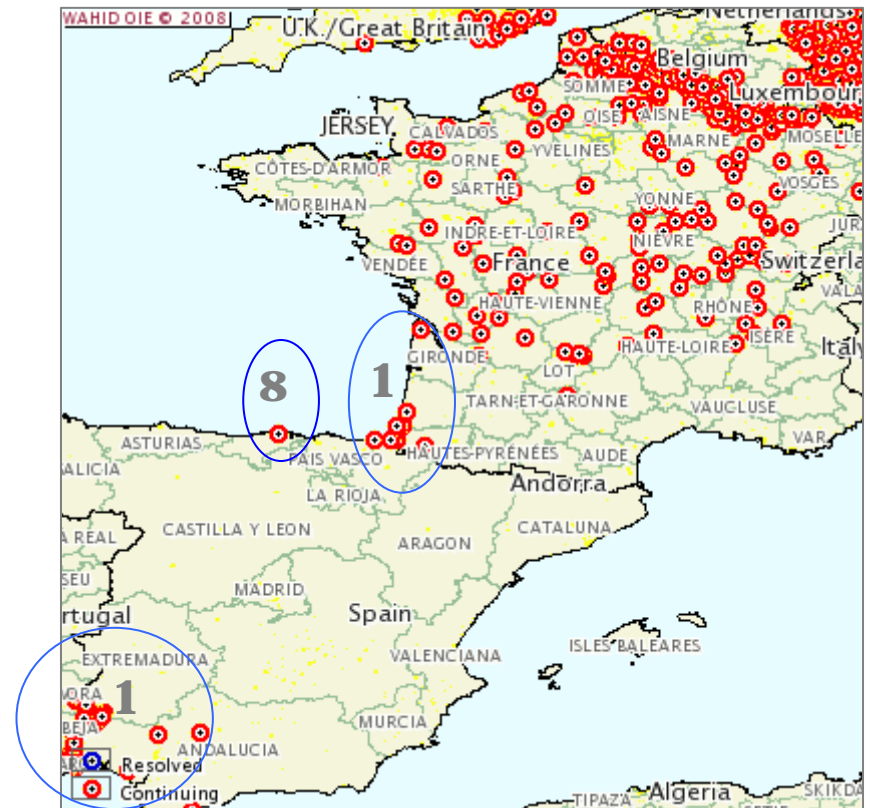


Exceptional epidemiological events: examples (2007-2008)

HPAI



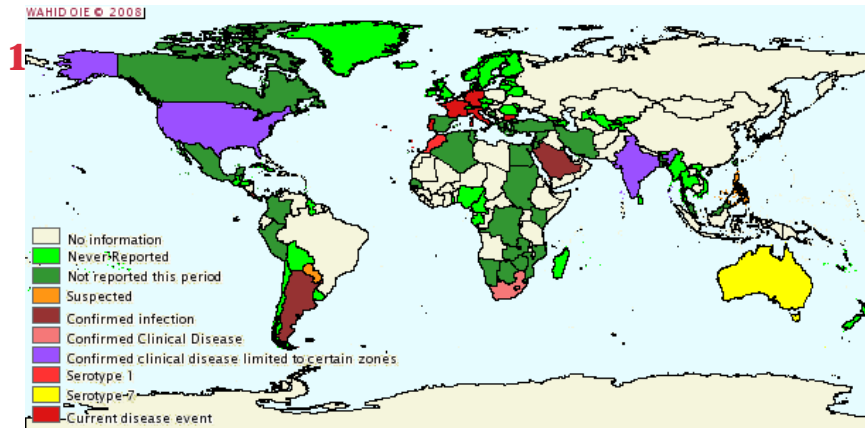
Bluetongue



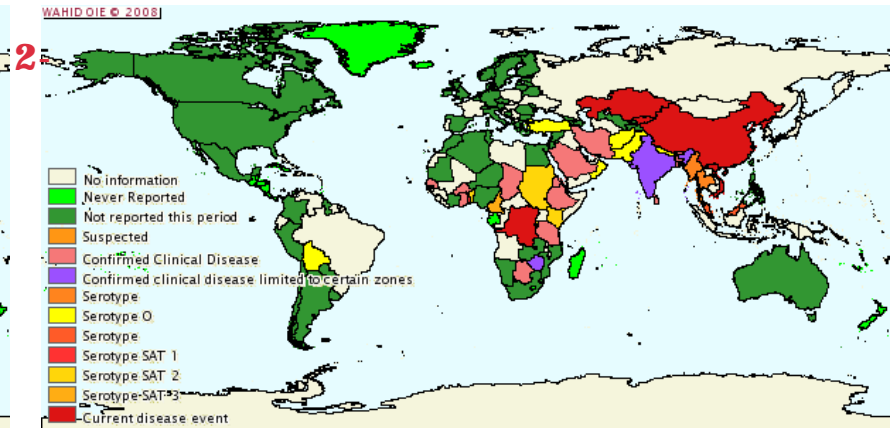
OIE Monitoring System: examples (2007)

Disease distribution

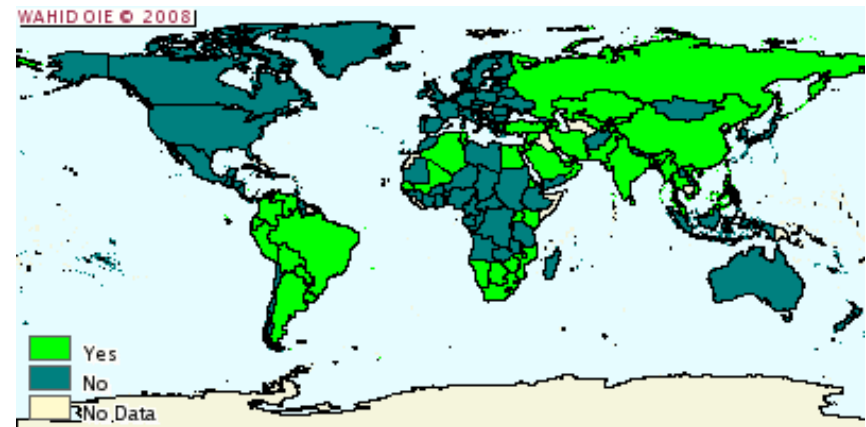
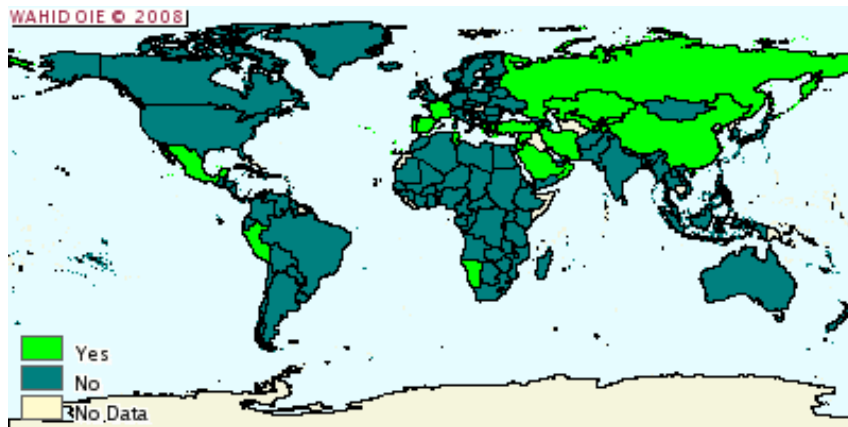
BT



FMD



Control measures



Routine vaccination: *Brucella melitensis*

Routine Vaccination: FMD

Annual report: Zoonosis in Humans

The screenshot displays the WAHID Interface in Microsoft Internet Explorer. The browser address bar shows the URL: http://www.oie.int/wahid-prod/public.php?page=country_zoonoses&year=2005. The page content is organized by country, with each country having a list of diseases and a corresponding table of statistics.

Venezuela

- Venezuela
- Vietnam
- South Africa

Albania

Disease	Cases	Deaths	Rate per 100,000 population	Rank
Brucellosis	700	0	19.6457	1
Anthrax	3	0	0.0842	2

Argentina

Disease	Cases	Deaths	Rate per 100,000 population	Rank
Bovine tuberculosis	5195	713	13.1393	1
Trichinellosis	391	0	0.9889	2
Echinococcosis/hydatidosis	349	19	0.8827	3
Brucellosis	284	0	0.7183	4
Leishmaniosis	282	1	0.7132	5
Leptospirosis	197	3	0.4983	6
Escherichia coli O157	180		0.4553	7
Avian chlamydiosis	98	0	0.2479	8
Hantavirus pulmonary syndrome	27	0	0.0683	9
Anthrax	14		0.0354	10
Botulism	5	3	0.0126	11

Australia

Disease	Cases	Deaths	Rate per 100,000 population	Rank
Campylobacteriosis	16464	2	81.9494	1
Salmonellosis	8506	2	42.3386	2
Q fever	350	0	1.7421	3
Avian chlamydiosis	159	0	0.7914	4
Leptospirosis	129	0	0.6421	5
Listeriosis	54	3	0.2688	6

The taskbar at the bottom shows the system tray with the time 10:28 and several open applications including Microsoft Outlook, Internet Explorer, and presentation software.

Active search of un-official information and rumours



- ☒ Scientific publications, Promed, GPHIN, Copernic, news, lay publications...
- ☒ published after verification and Member confirmation



**The Joint FAO/OIE/WHO Global
Early Warning System and
Response for Major Animal
Diseases and Zoonosis
(GLEWS)**

Global Early Warning and Response System (GLEWS)

Early Warning

- Disease Alerts
- Trends and Analysis
- Climate change

Emergency Response

- Urgent intervention
- Coordinated response
- Rehabilitation



Global Early Warning System (GLEWS) PLATFORM

FAO | OIE | WHO

Analysis



OIE, FAO, WHO
Disease Tracking Systems

Additional data

Other FAO and UN data
Refugees
Climatic data
Production, Economic data

Conclusion

WHY NOTIFY ?



CREDIBILITY

The quality of the information provided to the OIE

- ▶ reflects the **degree of knowledge of the animal health situation** in the country
- ▶ is an important factor in the **evaluation of Vet. Services**

Disease control cannot be done properly without **accurate and reliable epidemiologic data**

Thank you for your attention

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

Have you subscribed to the OIE-Info distribution list?

If not, you can do it from:
http://www.oie.int/eng/info/en_listserv.htm