The OIE’s World Animal Health Information System

Training Seminar for OIE Delegates from Europe
Lyon, 5-6 November 2009

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Sub-Regional Representation in Brussels
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1. Introduction

2. OIE’s list of diseases

3. Notification procedures

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5. Transparency

6. Conclusion
First OIE historical objective:

To ensure transparency in the global animal disease and zoonosis situation
By deciding to join the OIE, a Member agrees to fulfil its international commitment to notify to the OIE

- as laid down in the Chapters 1.1 of the OIE’s Terrestrial Code and 1.2.1 of the OIE’s Aquatic Code (“Notification of diseases and Epidemiological Information”)
“Members shall make available to other Members, through the OIE, whatever information is necessary to minimise the spread of important animal diseases and to assist in achieving better worldwide control of these diseases”

“To achieve this, countries shall comply with the notification requirements specified in Art..”
INTRODUCTION

DEFINITION OF ‘NOTIFICATION’

Means the procedure by which:

- The Veterinary Authority informs the Central Bureau
- The Central Bureau informs Veterinary Authorities,

of the occurrence of an outbreak of disease or infection, according to the provisions of the OIE’s Codes.
1. Introduction

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Single list (since 2005)

Criteria for listing diseases/infections:

- Capacity for international spread
- Capacity for significant spread within naïve populations
- Zoonotic potential
- Emerging 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 contained in Chap 1.4)? OR
• Do OIE annual reports indicate that a significant number of countries with susceptible populations have reported absence of the disease for several consecutive years?

NO

YES

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

NO

YES

SIGNIFICANT SPREAD IN NAIVE POPULATIONS
• Does the disease exhibit significant mortality at the level of a country or zone? OR
• Does the disease exhibit significant morbidity at the level of a country or zone?

NO

YES

INCLUDE

EXCLUDE

INCLUDE

EXCLUDE

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

EXCLUDE

INCLUDE
Criteria for listing diseases/infections:

- Consequences (significant production losses / impact on wild animal populations / public health concern)
- Capacity for international spread
- Capacity for diagnosis
- Emerging disease

Similar criteria apply
In 2008: 93 diseases

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

In 2008: 30 diseases

9 fish, 7, molluscs, 12 crustaceans, 2 amphibians
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The new obligations:

- Clearly address the concept of *infection* without necessarily having clinical expression of the disease

- Take clearly into account *changes in epidemiological situations* regarding diseases within a country or a zone/compartment

- Better address the problem of *emerging diseases*
**NOTIFICATION PROCEDURES**

**STEPS IN REPORTING**

- **Immediate notification** of disease/infection/unusual epidemiological events
  - **Weekly reports**: Follow-up to the immediate notification
  - **Final report**:
    - if the outbreaks have ended
    - if the situation becomes endemic
  - **Six-monthly report**
  - **Annual report**
What needs immediate notification - within 24 hours?

1 - First occurrence of a listed disease and/or infection in a country, a zone or a compartment (C/Z/Cpt)

2 - Re-occurrence of a listed disease and/or infection in a C/Z/Cpt following a report declared the outbreak ended

3 - First occurrence of a new strain of a pathogen of an OIE listed disease in a C/Z/Ct
NOTIFICATION PROCEDURES
IMMEDIATE NOTIFICATION

4 - A sudden and unexpected increase in the distribution, incidence, morbidity or mortality of a listed disease prevalent within a C/Z/Cpt

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 or mortality or zoonotic potential
Immediate notification

- New Disease
- New Infection
- Unusual epidemiological event

Emerging disease

- Report
  - Type of event
  - Source of infection
  - Outbreak 1
  - Location
  - Animals Affected
  - Outbreak 2
  - Outbreak n

- Control measures
- Nature of diagnosis
- Laboratory tests

OIE listed disease / infection

- New Disease
- New Infection
- Unusual epidemiological event
Weekly Reports

Follow-up to the immediate notification to provide further information on the evolution of the incident

Final Report
Six-monthly Reports
on the absence or presence of listed diseases

Part 1: Qualitative information

- disease occurrence,
- control, prophylaxis and prevention measures,
- indication of the type of report to use to notify diseases or infections/infestations present in the country (=> part 2)
Part 2: Quantitative information

Template 1: By lowest level Administrative Division and by Month

Template 2: For the whole Country by Month

Template 3: By lowest level Administrative Division for the six months period

Template 4: For the whole Country for the six months period

recommended by the OIE
Six-monthly Report

For each disease:

- Surveillance and control measures
- Disease: Absent
  - Never reported
  - Not reported for this period
- Disease: Present
  - New outbreaks
  - Total outbreaks
  - Animals Affected
Annual report

► Information on non OIE-listed diseases

► Information on Vet. Services’ staff

► National Reference Laboratories

► Livestock census
  (by lowest level administrative division, etc.)

► Zoonoses (human cases)

► Production of vaccines
WAHIS allows registration for all kind of reports

- Official reporting Format
- WAHIS web application
  (with login, password for each Delegate)
- Detailed Guidelines
- Specialist focal point for Animal Health information system
  (with login, password)
WAHIS online notification application

1: Manage Reports That May Need Follow-Up Reports

<table>
<thead>
<tr>
<th>County/Territory</th>
<th>OIE</th>
<th>Name</th>
<th>Action</th>
<th>Country Code</th>
<th>Status</th>
<th>Action Reference</th>
<th>Disease</th>
<th>Reason</th>
<th>Date of First Occurrence</th>
<th>Code of Report</th>
<th>Report Type</th>
<th>Need to be Resubmitted?</th>
<th>Validation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHL</td>
<td>OIE</td>
<td>Chile</td>
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</tbody>
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2. OIE’s list of diseases

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4. Outputs of WAHIS = WAHID Interface

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**SYSTEM IN PLACE**

**WAHIS => WAHID**

- **WAHIS**
  - Immediate notifications & follow-ups
  - Semestrial reports
  - Annual questionnaires

- **WAHID**
  - World Animal Health Information Database
    - (≥ 2005)

- **SAMBA**
  - 1996-2004

- **OIE-Info distribution list**: Alert messages

- **WAHID Interface**

- **World Animal Health (publication)**

- **Handistatus II**
  - 1996-2004

*OIE*
EARLY WARNING SYSTEM
PROCEDURE

- Distribution lists
  - OIE-Info-Delegates
  - OIE-Info-Web (for the public)
- OIE web site
DATABASE
IMMEDIATE NOTIFICATION
**DATABASE**

**WEEKLY DISEASE INFORMATION**
Immediate notification and follow-up reports

<table>
<thead>
<tr>
<th>Weekly Disease Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vol. 21 - No. 40, 2 Oct, 2008</strong></td>
</tr>
<tr>
<td>- 20/09/2008: Nyrorefnosis, Luxembourg, (Immediate notification)</td>
</tr>
<tr>
<td>- 25/09/2008: Bluetongue, Denmark, (Follow-up report No. 2)</td>
</tr>
<tr>
<td>- 25/09/2008: Highly pathogenic avian influenza, Pakistan, (Follow-up report No. 1)</td>
</tr>
<tr>
<td>- 25/09/2008: Classical swine fever, Brazil, (Immediate notification)</td>
</tr>
</tbody>
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<tr>
<td><strong>Vol. 21 - No. 39, 25 Sep, 2008</strong></td>
</tr>
<tr>
<td>- 25/09/2008: Bluetongue, Denmark, (Follow-up report No. 2)</td>
</tr>
<tr>
<td>- 25/09/2008: Highly pathogenic avian influenza, Pakistan, (Follow-up report No. 1)</td>
</tr>
<tr>
<td>- 25/09/2008: Classical swine fever, Brazil, (Immediate notification)</td>
</tr>
<tr>
<td>- 23/09/2008: Rift Valley fever, Swaziland</td>
</tr>
<tr>
<td>- 22/09/2008: West Nile Fever, Guadeloupe</td>
</tr>
<tr>
<td>- 21/09/2008: Equine influenza, Egypt</td>
</tr>
<tr>
<td>- 20/09/2008: Highly pathogenic avian influenza, South Africa</td>
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<tr>
<td>- 19/08/2008: Feste des petits ruminants, Togo</td>
</tr>
<tr>
<td>- 19/08/2008: Avian influenza, Nigeria</td>
</tr>
<tr>
<td>- 19/08/2008: Anthrax, Finland, (Immediate notification)</td>
</tr>
<tr>
<td>- 19/08/2008: African horse sickness, Freetown, Sierra Leone</td>
</tr>
<tr>
<td>- 18/08/2008: Foot and mouth disease, Botswana, (Follow-up report No. 2)</td>
</tr>
<tr>
<td>- 18/08/2008: Highly pathogenic avian influenza, Togo, (Immediate notification)</td>
</tr>
</tbody>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Vol. 21 - No. 38, 18 Sep, 2008</strong></td>
</tr>
<tr>
<td>- 18/09/2008: Foot and mouth disease, Botswana, (Follow-up report No. 2)</td>
</tr>
<tr>
<td>- 18/09/2008: Highly pathogenic avian influenza, Togo, (Immediate notification)</td>
</tr>
<tr>
<td>- 17/09/2008: Porcine reproductive and respiratory syndrome, Bhutan, (Follow-up report No. 1)</td>
</tr>
<tr>
<td>- 17/09/2008: Glanders, Brazil, (Follow-up report No. 1)</td>
</tr>
<tr>
<td>- 16/09/2008: Bluetongue, Portugal, (Follow-up report No. 1)</td>
</tr>
<tr>
<td>- 16/09/2008: Newcastle disease, Peru, (Follow-up report No. 1)</td>
</tr>
<tr>
<td>- 15/09/2008: Bluetongue, Hungary, (Immediate notification)</td>
</tr>
</tbody>
</table>
World Animal Health publication

WAHID interface
1. Introduction
2. OIE’s list of diseases
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6. Conclusion
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**
Article 5.1.3. Responsibilities of the exporting country:

“An exporting country should, on request, supply the following to importing countries:

- **information on the animal health situation and national animal health information systems** to determine whether that country is free or has free zones of listed diseases, including the regulations and procedures in force to maintain its free status;

- **regular and prompt information on the occurrence of notifiable diseases**;

- **details of the country's ability to apply measures to control and prevent the relevant listed diseases**;

…”
Article 5.1.4. Responsibilities in case of an incident related to importation:

In case of appearance of a disease included in the certificate discovered by the exporting / importing country within the recognised incubation period after export:

⇒ Notification to the importing / exporting country
⇒ To allow appropriate actions to be taken quickly
Once a country’s epidemiological data loses **credibility**, especially for trade, it is difficult and time-consuming to recover.
TRANSPARENCY
KEY FACTORS

► Independence of Veterinary Services
► Clear understanding of the beneficial effects of transparency
► Appropriate infrastructure (laboratories, systems of communication, …)
► Efficient organisation (chain of command, legal basis, definition of responsibilities, etc.)
► Sufficient human resources within Veterinary Services (staff, qualification, territorial meshing,..)
► Knowledge of the OIE’s standards and notification procedures

QUALITY OF VETERINARY SERVICES
OIE’s active search and verification of non official information

- Scientific publications, Promed, GPHIN, Copernic, news, lay publications…

- Published after verification and Member confirmation
TRANSPARENCY

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

Analysis

OIE, FAO, WHO
Disease Tracking Systems

Additional data
- Other FAO and UN data
- Refugees
- Climatic data
- Production, Economic data
## TRANSPARENCY TRACKING ACTIVITIES’ RESULTS

<table>
<thead>
<tr>
<th>Year</th>
<th>N° of verification requests</th>
<th>Answers</th>
<th>No answers</th>
<th>Official Notifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>32</td>
<td>18 (56%)</td>
<td>14 (43%)</td>
<td>18 (56%)</td>
</tr>
<tr>
<td>2003</td>
<td>29</td>
<td>24 (79.2%)</td>
<td>5 (20.8%)</td>
<td>14 (48.2%)</td>
</tr>
<tr>
<td>2004</td>
<td>85</td>
<td>67 (78.8%)</td>
<td>18 (21.2%)</td>
<td>39 (48.7%)</td>
</tr>
<tr>
<td>2005</td>
<td>97</td>
<td>74 (76.2%)</td>
<td>23 (23.7%)</td>
<td>36 (37.1%)</td>
</tr>
<tr>
<td>2006</td>
<td>118</td>
<td>83 (70.3%)</td>
<td>35 (29.6%)</td>
<td>69 (58.4%)</td>
</tr>
<tr>
<td>2007</td>
<td>140</td>
<td>103 (73.6%)</td>
<td>37 (26.4%)</td>
<td>71 (50%)</td>
</tr>
</tbody>
</table>
TRANSPARENCY

USE OF ALERT MESSAGES BY DELEGATES

Percentage of Delegates

Ban on Importation 55%
Strengthening Surveillance 33%
Risk Analysis 12%

Decision Taken

TRANSPARENCY

USE OF ALERT MESSAGES BY DELEGATES
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CONCLUSIONS

The OIE’s has a long tradition and rich experience in disease information sharing among Members.

The OIE’s WAHIS/WAHID reflect:

- the quality of information generated and provided by its Members
- and the degree of their commitment to provide to the OIE timely, transparent & accurate data.
CONCLUSIONS

Key role of all the veterinarians in each Member, above all of the ones working:

- on the farms
- in the local VS!
Thank you for your attention
Organisation Mondiale de la Santé Animale

World Organisation for Animal Health

Organización Mundial de Sanidad Animal