WORLD ANIMAL HEALTH INFORMATION SYSTEM AND DATABASE (WAHIS & WAHID)

Animal Health Information Department, OIE

OIE Regional Seminar for Recently Appointed OIE Delegates
Tokyo (Japan) 7-8 February 2012
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Introduction

1. OIE’s list of diseases

2. World Animal Health Information Systems

3. Notification procedures

4. Role of the focal points for animal disease notification to the OIE

5. Main functional improvements to be implemented in WAHIS 2.0.

Conclusion
General mandate of the OIE: to improve animal health worldwide

One of the OIE’s main objective

To ensure transparency in the global animal disease situation, including for zoonosis
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 and Aquatic Codes (“Notification and Epidemiological Information”)
MEANING OF ‘NOTIFICATION’

The procedure by which:

- The Veterinary Authority informs OIE Headquarters
- The OIE Headquarters informs all Veterinary Authorities,

of the suspicion or confirmation of an outbreak of a disease or other epidemiological event, according to the provisions of the OIE’s Codes.
Criteria for listing diseases (infections):

- Capacity for international spread
- Capacity for significant spread within naïve populations
- Zoonotic potential
- Emerging disease

Similar criteria apply
DECISION TREE USED TO DETERMINE THE LIST

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 Chapter 1.4.)?
  OR
• Do OIE annual reports indicate that a significant number of countries with susceptible populations have reported the absence of the disease for several consecutive years?

EMERGING DISEASES
(A newly recognised pathogen or known pathogen behaving differently)

Are there apparent zoonotic properties? OR
Is there rapid spread?

ZOONOTIC POTENTIAL
• Has natural transmission to humans been proven? AND
• Is human infection associated with severe consequences?

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 NO YES
EXCLUDE INCLUDE EXCLUDE INCLUDE

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In 2011: 93 diseases

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

In 2011: 26 diseases

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

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Introduction

1. OIE’s list of diseases

2. World Animal Health Information Systems
   a. Early warning system
   b. Monitoring system
   c. Tracking activities

3. Notification procedures

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Conclusion
TYPES OF NOTIFICATION REPORTS

OIE’s early warning system
- International alert messages
- Rapid response

OIE’s monitoring system
- To monitor OIE Listed diseases (presence or absence) over time

Immediate notification
- of disease, infection or unusual epidemiological events

Weekly reports
- Follow-ups to the immediate notification to inform on control measures and changes on epidemiological situation

Final report
- if the outbreaks have ended
- if the situation becomes endemic

Six-monthly report

Annual report
REASONS FOR IMMEDIATE NOTIFICATION WITHIN 24 HOURS


1. first occurrence of a listed disease and/or infection in a country or zone/compartment;

2. re-occurrence of a listed disease and/or infection in a country, a zone/compartment following a report declaring previous outbreak(s) ended;

3. first occurrence of a new strain of a pathogen of an OIE listed disease in a country, a zone or a compartment;
REASONS FOR IMMEDIATE NOTIFICATION WITHIN 24 HOURS


4. a sudden and unexpected increase in the distribution, incidence, morbidity or mortality of a listed disease prevalent within a country, a zone or a compartment;

5. evidence of change in the epidemiology of a listed disease (including host range, pathogenicity, strain) in particular if there is a zoonotic impact;

6. an emerging disease with significant morbidity or mortality, or zoonotic potential.
OIE IMMEDIATE NOTIFICATIONS

Year


Number of immediate notifications

0 20 40 60 80 100 120 140 160 180 200
OIE’S MONITORING SYSTEM

Six-monthly report on the absence or presence of OIE listed diseases

Part 1: Qualitative information

- Disease occurrence;
- Control, prophylaxis and prevention measures;

Part 2: Quantitative information

- By first administrative division and by month;
- For the whole country by month;
- By first administrative division for the six months period;
- For the whole country for the six-months period.

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Annual report

For OIE-listed diseases: the sum of information of the two six-monthly reports of a given year

and:

- Non OIE-listed diseases;
- Human resources in Veterinary Services;
- National Reference Laboratories;
- Livestock census (by first administrative division);
- Zoonoses (human cases and deaths);
- Production of vaccines.
TRACKING ACTIVITIES
ACTIVE SEARCH FOR NON-OFFICIAL ANIMAL HEALTH INFORMATION
Active search of unofficial sources
- Verification with OIE Delegates
- Improve OIE’s early warning system

ONLY OFFICIALLY CONFIRMED INFORMATION IS PUBLISHED BY THE OIE

Number of enquiries related to non-official information between 2002 and 2011

Source: Animal Health Information Department
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WORLD ANIMAL HEALTH INFORMATION SYSTEM (WAHIS)
WAHIS is the OIE’s world animal health information system.

An access (login, password) is given to each Delegate.

He/she has the possibility to create an access to his/her nominees (focal points).

URL address: www.oie.int/wahis
WAHIS ONLINE NOTIFICATION

- Provides countries with a **simpler and quicker method of sending sanitary information** => compliance countries with their international obligations vis-à-vis the OIE;

- **Allows countries** to benefit from the new capabilities put in place to **produce essential and useful information** while minimizing possible errors or delays;

- Countries’ data benefit from the **systems reliability and safety**.
Access to WAHIS application **allows users** from Member Countries and Territories, namely Delegates or their nominees, **to electronically submit notification reports:**

- immediate notifications
- follow-up reports
- six-monthly reports
- annual reports

**Wildlife annual questionnaire:**

➢ to be included in a new application **WAHIS-Wild**
WORLD ANIMAL HEALTH INFORMATION SYSTEM (WAHIS) AND ITS INTERFACE WAHID.

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FOCAL POINTS

- Nominated by the Delegate
- Under his/her responsibility
- Seven focal points to assist the OIE Delegate
  - Animal Disease Notification
  - Aquatic animals
  - Wildlife
  - Animal Production Food Safety
  - Veterinary Products
  - Animal Welfare
  - Communication
ROLES OF THE FOCAL POINTS FOR ANIMAL DISEASE
NOTIFICATION TO THE OIE

- For specific reports
  - Aquatic / terrestrial animals diseases
  - Immediate notification / six-monthly / annual reports
  - Wildlife

- Ensure the optimal **collection of data**

- Ensure the **submission of information** on animal diseases

- Act as a **direct national contact point with the OIE Animal Health Information Department** on matters related to information on animal diseases.
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Conclusion
RECENT CRISSES: NEED TO ADAPT TO THE SITUATION - NOTIFICATION OF DISEASES IN WILD ANIMALS

SENSITIVITY OF WAHIS DATA

- possible consequences of reporting diseases in wild animals by putting *unjustified trade barriers*

- *side effect on transparency* with countries not notifying on diseases observed in wild species

- **Better understanding of disease** situation in both domestic and wild animals

- **Better risk analysis** for importing countries

- **Less unjustified trade barriers**.
AMONG THE NEW FUNCTIONALITIES OF WAHIS

- **Domestic and wild animals**: codes differentiation

- **Terrestrial and aquatic animal diseases**: two different six-monthly reports

- **Monthly quantitative data**: possibility to send information on a monthly basis and to complete the six-monthly report at the end of the semester

- **List of susceptible wild species** (scientific and common name) in order to report the correct host animal
Some examples:

<table>
<thead>
<tr>
<th>Disease Name</th>
<th>Species</th>
<th>No Information</th>
<th>Disease and Infection Absent</th>
<th>Disease and/or Infection Present</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Never Reported</td>
<td>Not reported in this period</td>
</tr>
<tr>
<td>Foot and mouth disease</td>
<td>N</td>
<td>Domestic</td>
<td>0000</td>
<td>-</td>
</tr>
<tr>
<td>Vesicular stomatitis</td>
<td>N</td>
<td>Domestic</td>
<td></td>
<td></td>
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<tr>
<td>Rift Valley fever</td>
<td>N</td>
<td>Domestic</td>
<td></td>
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<tr>
<td>Bluetongue</td>
<td>N</td>
<td>Domestic</td>
<td></td>
<td></td>
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<tr>
<td>Anthrax</td>
<td>N</td>
<td>Domestic</td>
<td></td>
<td></td>
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<tr>
<td>Avian leukosis/lymphoma</td>
<td>N</td>
<td>Domestic</td>
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<td>Echinoccosis/hydatidosis</td>
<td>N</td>
<td>Domestic</td>
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<tr>
<td>Hendra virus</td>
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<td>Domestic</td>
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</tbody>
</table>
### NEW FUNCTIONALITY (1)

Some examples from the **review report page**:

1. **Summary on OIE-listed diseases/infections present in Tokelau**

<table>
<thead>
<tr>
<th>OIE-Listed disease</th>
<th>occurrence</th>
<th>Serotype(s)</th>
<th>New outbreaks</th>
<th>Total outbreaks</th>
<th>Species</th>
<th>Control Measures</th>
<th>Routine Vaccinated</th>
<th>Measuring units</th>
<th>Susceptible</th>
<th>Cases</th>
<th>Deaths</th>
<th>Destroyed</th>
<th>Slaughtered</th>
<th>vacc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot and mouth disease (Domestic and Wild)</td>
<td>+</td>
<td>No</td>
<td>2</td>
<td>2</td>
<td>bov</td>
<td>*</td>
<td>*</td>
<td>Animals</td>
<td>100</td>
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<td>Animals</td>
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</tbody>
</table>

2. **OIE-listed diseases absent in Tokelau during the reporting period or never reported.**

1° **Example:** *Foot and mouth disease present in the country for domestic and wildlife species with the same occurrence code*

2° **Example:** *Foot and mouth disease present in the country for domestic and wildlife species with different occurrence code*
NEW FUNCTIONALITY (2&3)
MAIN STEPS IN IMPROVING THE NOTIFICATION OF DISEASES IN WILDLIFE

2005 2007 2008 2009 2010 2011

- presence of the disease in wildlife displayed in the quantitative data
- Differentiation in WAHID of outbreaks regarding domestic and wild species
- Differentiation of the occurrence codes in domestic and wild species
- List of susceptible wild species

Wild questionnaire managed by the Working Group
Wild questionnaire managed by the SIS

WAHIS-Wild.

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Annual wildlife report: *WAHIS-Wild*

- **OIE listed diseases**
- **Non OIE listed wildlife diseases**

A new Web Interface will be designed to display **VOLUNTARY INFORMATION** on wildlife disease that are not OIE listed diseases.
Annual Wildlife report: WAHIS-Wild

Divided in two sections:

– OIE-listed diseases in wild species
  • Already entered in the six-monthly reports
  • Automatically transferred into the draft Annual wildlife report
  • To be checked, corrected and completed if needed by the focal point for wildlife.
  • Changes have to be agreed by the Delegate
  • Data will be displayed on WAHID

– Non OIE-listed wildlife diseases
  • To be processed by the focal point for wildlife
  • Data will be displayed on a specific website
1. OIE’s list of diseases

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CONCLUSION

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

The OIE’s WAHIS reflects:

- 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.

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de la santé animale

World Organisation
for Animal Health

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de Sanidad Animal

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