



## Driving progress towards rabies elimination

*“Country reporting of rabies to Global level- OIE World Animal Health information System – WAHIS and WAHIS+”*

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**PARACON and WHO Joint Meeting**

**12-14 September , 2018**

**Johannesburg, South Africa**



**WORLD ORGANISATION FOR ANIMAL HEALTH** *Protecting animals, preserving our future*

# Mandate of two global organisations

- **Responsibility for collection and disseminating disease information rests within the mandates of two global organisations:**



- World Health Organization (WHO) for diseases of humans;



- World Organisation for Animal Health (OIE) for animal diseases, including animal diseases transmissible to humans (zoonoses).

## 182 Member Countries and OIE Delegates in 2018

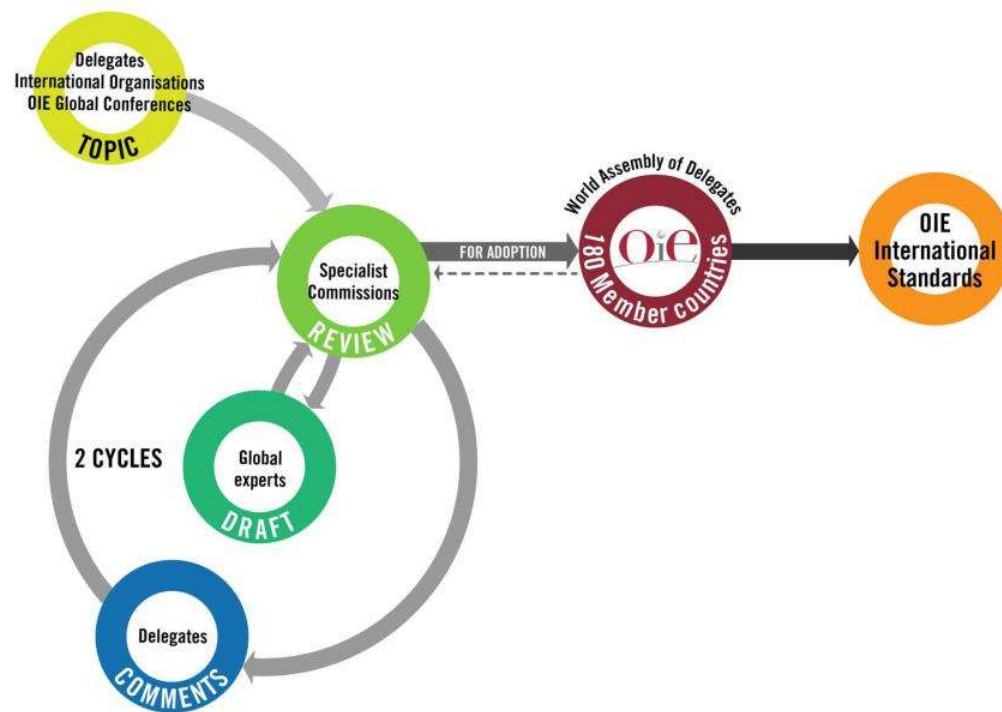


Certain countries belong to more than one region

## WHO has IHR and OIE has Standards - Codes



# OIE Standard Setting Process



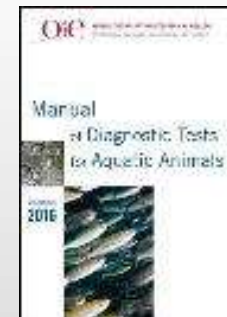
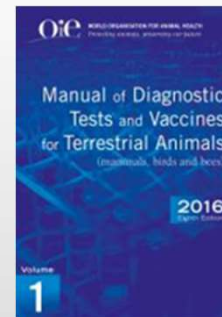
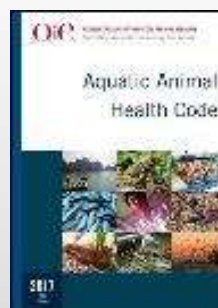
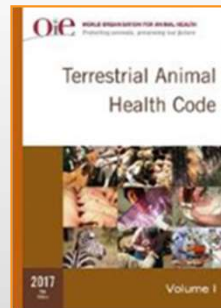
## Publishing OIE Standards – Codes and Manuals

### **CODES**

- Terrestrial
- Aquatic

### **MANUALS**

- Terrestrial
- Aquatic

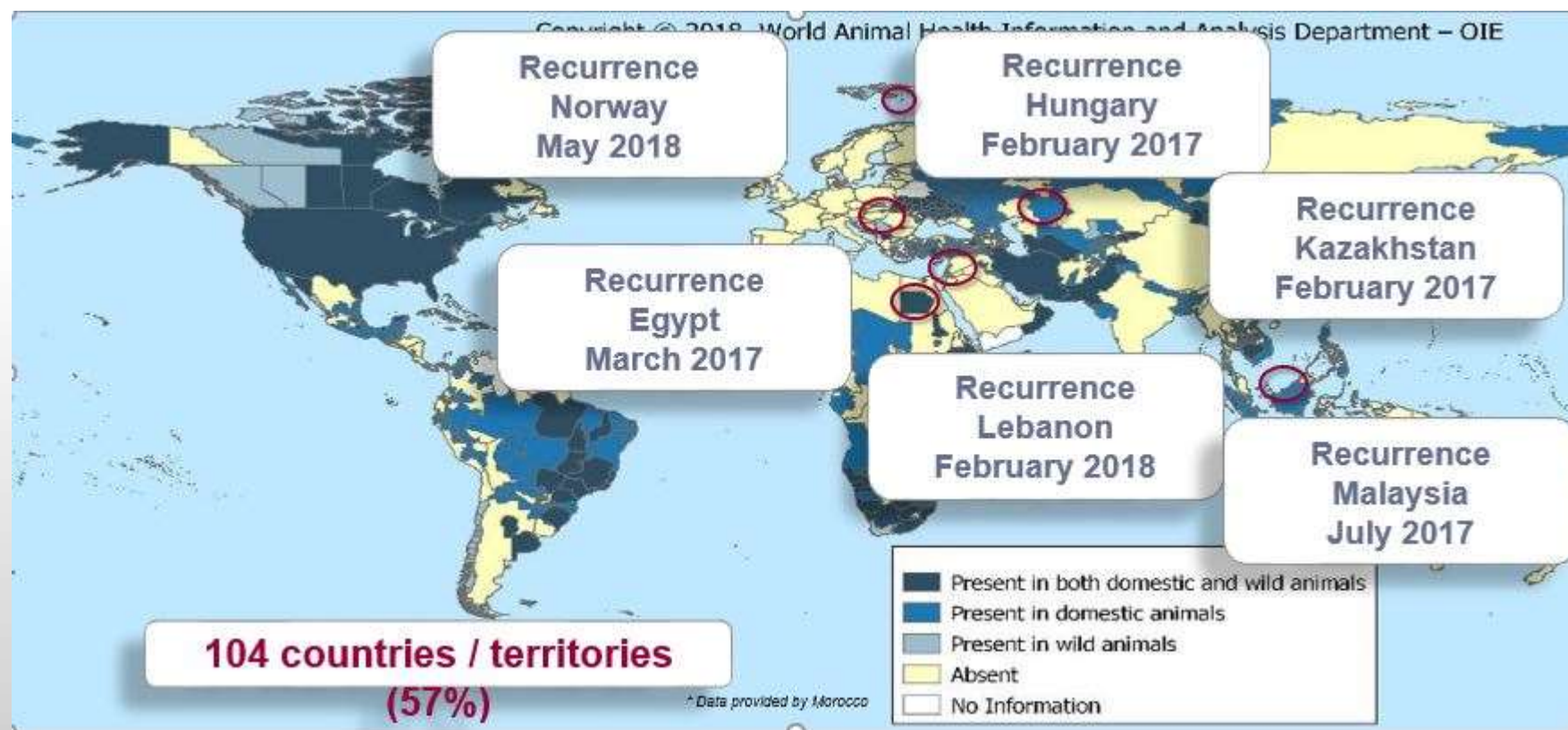


**Codes and Manuals available on the OIE website [www.oie.int](http://www.oie.int)**

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# **OIE's World Animal Health Information System and One Health surveillance WAHIS**

# Rabies Distribution in 2017 and early 2018





# Diseases reporting in animals for rabies

- Terrestrial Animal Health Code Part 1.
- Animal disease diagnosis, surveillance and notification
- Chapter 1.1. 2. Member Countries shall make available to other MC, through the OIE, whatever information is necessary to minimise the spread of important animal diseases, and their pathogenic agents, and to assist in achieving better worldwide control of these diseases.
- Reports of a single outbreak or related outbreaks- susceptible species, numbers and geographic distribution of affected animals and epidemiological unit
- Member Countries provide information on the measures taken to prevent the spread of diseases (vaccination). Include quarantine measures and restriction of movement.

## Diseases reporting in animals for rabies - continued

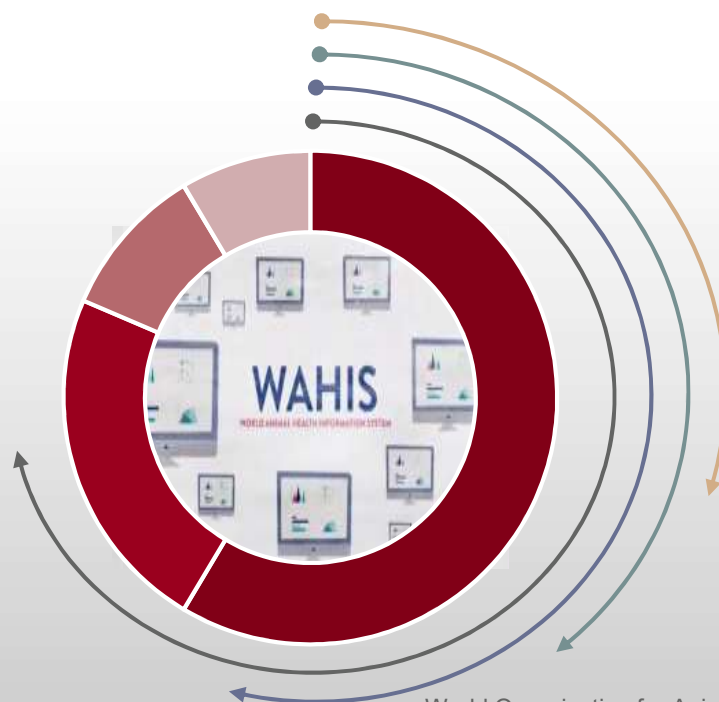
- Article 1.1.3 in accordance with relevant provisions in the disease-specific chapters, (Part 2 Chapter 8.14. Infection with rabies virus) *notification*, through the World Animal Health Information System (WAHIS) or by fax or email within **24 hours** of:
  - first occurrence of a listed diseases, or
  - reoccurrence of a listed diseases
  - a sudden and unexpected change in the distribution or increase in incidence of listed disease
- Weekly reports subsequent to a notification – providing further information on the evolution of the event. These reports should continue until the disease has been eradicated or situation is stable. Final report submitted
- Then six-monthly reports on the absence or presence and evolution of listed disease
- Annual reports concerning any other information

# WAHIS today

a secure online notification system whose main purpose is being a global and sensitive early warning system

**> 990 000 visitors**  
Per year

**>1.8 millions  
pages viewed**  
per year



**117  
listed diseases**

**> 37 selected  
zoonoses**













**204  
Countries and territories  
providing data**

# WAHIS: animal diseases report

Rift Valley fever

Year:

**WAHIS Interface** Animal Health Information  
Information zoosanitaire  
Información Zoosanitaria

| Country name | Status                             | Number of outbreaks   | Event summary   | Full report   | Animals affected |             |       |        |                        |             |
|--------------|------------------------------------|---|---|---|------------------|-------------|-------|--------|------------------------|-------------|
| Kenya        | Continuing                         |  <a href="#">10</a>  |  <a href="#">Summary</a>   |  <a href="#">Full report</a>   | Species          | Susceptible | Cases | Deaths | Killed and disposed of | Slaughtered |
|              |                                    |   |   |   | Camelidae        | 730         | 33    | 17     | 0                      | 0           |
|              |                                    |   |   |   | Cattle           | 270         | 8     | 0      | 0                      | 0           |
|              |                                    |   |   |   | Goats            | 1046        | 52    | 0      | 0                      | 0           |
|              |                                    |   |   |   | Sheep            | 1380        | 35    | 0      | 0                      | 0           |
|              |                                    |   |   |   | Sheep / goats    | 80          | 2     | 0      | 0                      | 0           |
|              |                                    |   |   |   | Animals          | 3506        | 130   | 17     | 0                      | 0           |
| Rwanda       | Continuing                         |  <a href="#">8</a>   |  <a href="#">Summary</a>   |  <a href="#">Full report</a>   | Species          | Susceptible | Cases | Deaths | Killed and disposed of | Slaughtered |
|              |                                    |   |   |   | Cattle           | 33          | 26    | 2      | 0                      | 0           |
|              |                                    |   |   |   | Animals          | 33          | 26    | 2      | 0                      | 0           |
| South Africa | Continuing                         |  <a href="#">1</a> |  <a href="#">Summary</a> |  <a href="#">Full report</a> | Species          | Susceptible | Cases | Deaths | Killed and disposed of | Slaughtered |
|              |                                    |   |   |   | Sheep            | 600         | 250   | 250    | 0                      | 0           |
|              |                                    |   |   |   | Animals          | 600         | 250   | 250    | 0                      | 0           |
| South Sudan  | See incidence page from 03/04/2018 |  <a href="#">1</a> |  <a href="#">Summary</a> |  <a href="#">Full report</a> | Species          | Susceptible | Cases | Deaths | Killed and disposed of | Slaughtered |

- Geospatial data
- Time
- Number of outbreaks
- Animal species/group
- Quantitative data
- Control measures
- Epidemiological comments

# WAHIS: country annual report

| Disease  | Cases | Deaths |
|--|-------|--------|
| Campylobacteriosis                             | 64857 |        |
| Babesiosis                                     | 2307  |        |
| West Nile Fever                                | 1425  | 146    |
| Tularemia                                      | 219   |        |
| Q fever  | 192   | 0      |
| Brucellosis                                    | 126   |        |
| Bovine tuberculosis                            | 89    |        |
| Leptospirosis                                  | 74    |        |
| Hantavirus pulmonary syndrome                  | 29    | 7      |
| Trichinellosis                                 | 15    | 0      |
| Avian chlamydiosis                             | 6     |        |
| Equine encephalomyelitis (Eastern)             | 5     | 2      |
| Rabies   | 1     | 1      |
| Echinococcosis/hydatidosis                     | +     | +      |
| Leishmaniosis                                  | +     | +      |
| Toxoplasmosis                                  | +     | +      |
| Salmonellosis (S. enteritidis, S. typhimurium) | +     | +      |
| Cysticercosis                                  | +     | +      |

## Country A



World Animal Health Information Database (WAHIS Interface)  
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Release date: 30 December 2013 August 2012

| Disease  | Cases | Deaths |
|--|-------|--------|
| Leishmaniosis                                  | 14943 | 251    |
| Leptospirosis                                  | 2870  | 234    |
| Brucellosis                                    | 184   |        |
| Hantavirus pulmonary syndrome                  | 84    | 39     |
| Toxoplasmosis                                  | 32    | 0      |
| Salmonellosis (S. enteritidis, S. typhimurium) | 20    | 0      |
| Echinococcosis/hydatidosis                     | 12    | 0      |
| Campylobacteriosis                             | 9     |        |
| Rabies   | 2     | 2      |
| Q fever  | +     | +      |
| N. w. screwworm (C. hominivorax)               | +     | +      |
| Bovine tuberculosis                            | +     | +      |
| Avian chlamydiosis                             | +     | +      |
| Cysticercosis                                  | +     | +      |

## Country B

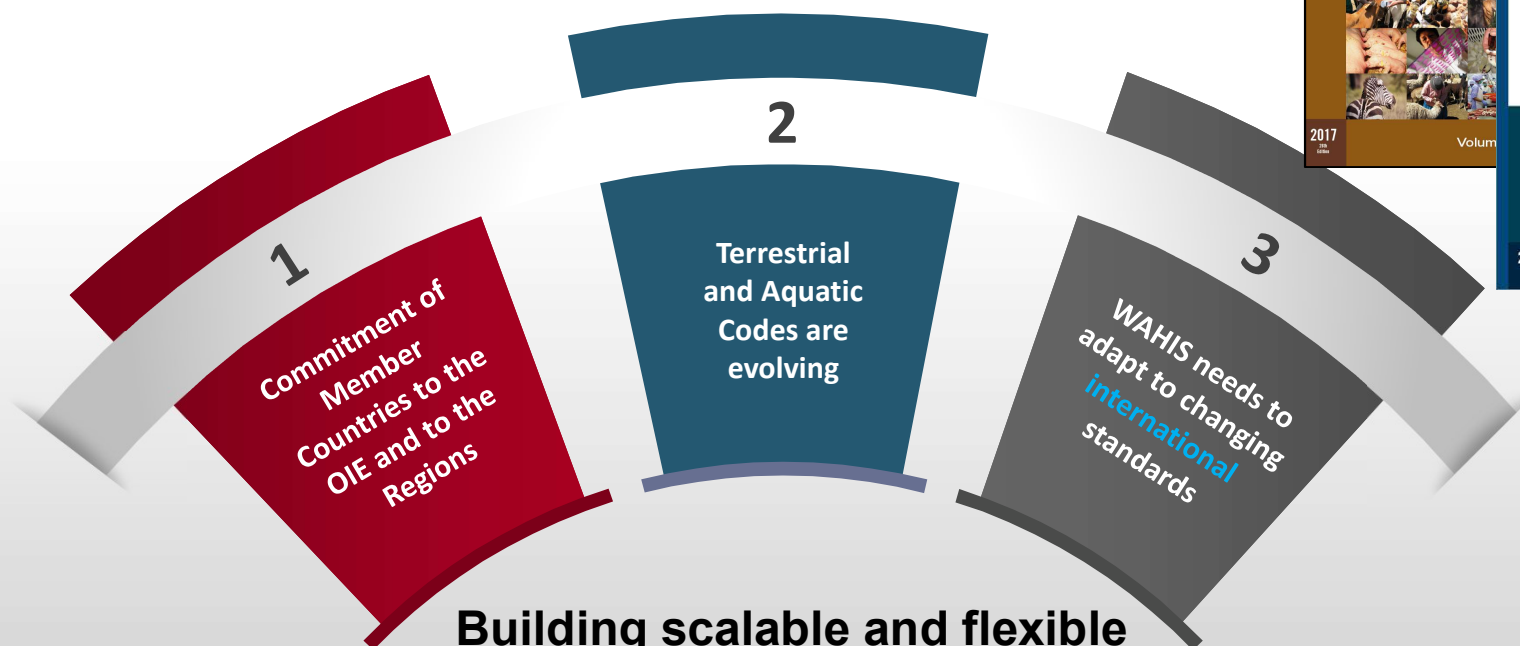


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Wo

future | 13

# WAHIS+ respond to evolving international standards



**Building scalable and flexible platform with a vision for the next decade**

# User friendly, intuitive, time-efficient

## Improved WAHIS+ mobile application

(Faster dissemination and access to diseases alerts)

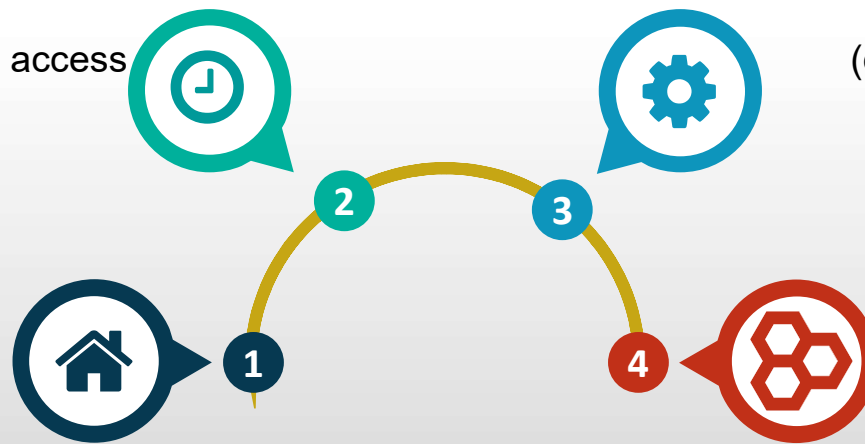
## Tailored dashboards for various audiences

(customizable searches and displays)

## User-friendly interface

(+data entry)

## Technically up-to-date with latest GIS features



# Data extraction & analysis

## Dedicated targeted interface

★ Assess and monitor Member Countries complete national animal health situation

## ⚙ Data mining & automatic tools for extraction

Diseases trend analysis including progress on controlling them

## Integrated spatial & temporal analysis

From static to dynamic vision

## Source of information for artificial intelligence systems

Contributing to automated alert systems, predictions or mitigation strategies.





# Interoperability and data sharing

Importing other  
data sources for  
contextual  
analysis

**Standard  
interconnection  
protocols**

Interconnection  
with international  
and regional  
systems

Automatic tools  
for data  
extraction



# Beneficiaries

## OIE Member Countries

(Incl. Govt agencies, public servants etc.  
(open access platform))



## Peer organisations and agencies

(e.g. International and regional organizations and others in global health security and trade)



## Existing & Potential investors

(e.g. Private foundations,  
Development partners)



## Other third-party beneficiaries

(e.g. academia, researchers,  
media, trade entities)



# Conclusion

- Current country reporting provides measures of rabies surveillance, official vaccination and precaution at borders
- Information systems built and evolving on novel technologies will meet the demands of the modern users for efficient data collection and information dissemination.
- The new WAHIS+, with its new and improved features, including interconnection capabilities, will address challenges faced in the operationalisation of the One Health Approach.

*Thank you*



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*Protecting animals, preserving our future*