WORLD ORGANISATION FOR ANIMAL HEALTH

Protecting animals, preserving our future

Features and opportunities of the new OIE-WAHIS system, with regard to wildlife diseases

WEBINAR

Regional Training of National OIE Focal Points for Wildlife

Intermediate cycle training round

20 - 25 September | **2021**

Paolo TIZZANI
World Animal Health Information and Analysis Department

Summary

- Features and opportunities of the new OIE-WAHIS system
- Disease reporting and link to six-monthly reports
- Future strategy for reporting on non OIE-listed diseases
  - Disease prioritization
  - Technical disease cards on non OIE-listed diseases
  - Decision tree for reporting non OIE-listed diseases to the OIE
  - Excel table for data collection

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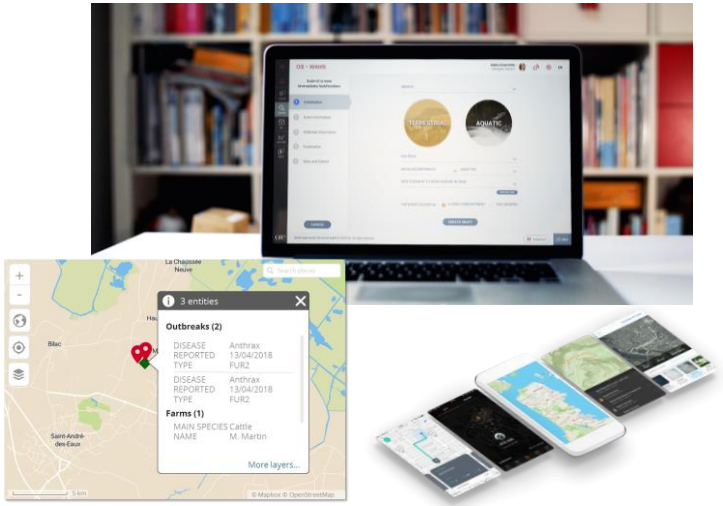
WHY OIE-WAHIS?

- User friendly, intuitive, time-efficient
- High resolution dynamic mapping
- Interoperability, integration and connectivity with other data and systems
- Open access of OIE-WAHIS data

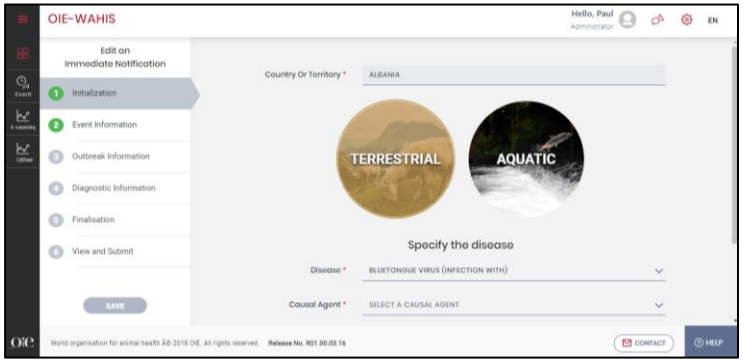


https://wahis.oie.int

Facilitating reporting, promoting the use of data

OIE-WAHIS timeline

OIE-WAHIS : A modern and dynamic platform to report the animal health situation



EARLY 2016

Survey #1 WAHIS evaluation, 10 years after launching

2017

Survey #2 Designing OIE-WAHIS together

APRIL 13th 2018

OFFICIAL **PROJECT KICK OFF**

OIE-WAHIS DEVELOPMENT

OCTOBER 17th 2019

KEY USERS COMMITTEE KICK OFF

MARCH 9th 2021

FIRST RELEASE GO-LIVE

2021-2022 and beyond

FURTHER RELEASES

OIE-WAHIS delivery strategy

9 March 2021

RELEASE 1

- Main Core Modules:
  Immediate notifications, 6 monthly reports, public interface
- Integration of historical data from 2005 (WAHIS)
- E-learning

2021-2022 and beyond

TO BE RELEASED SOON

- Standard Interconnection
- Smartphone App
- Further bug fixes and evolutions

FURTHER RELEASES

- Additional Core modules:
  Annual report, wild annual report, Public Wildlife Interface
- New module: Local report
- E-learning *(new modules)*
- Smartphone App *(new features)*
- Future innovations

OIE-WAHIS new functionalities: follow-up reports & improved mapping

Better **follow-up of events**

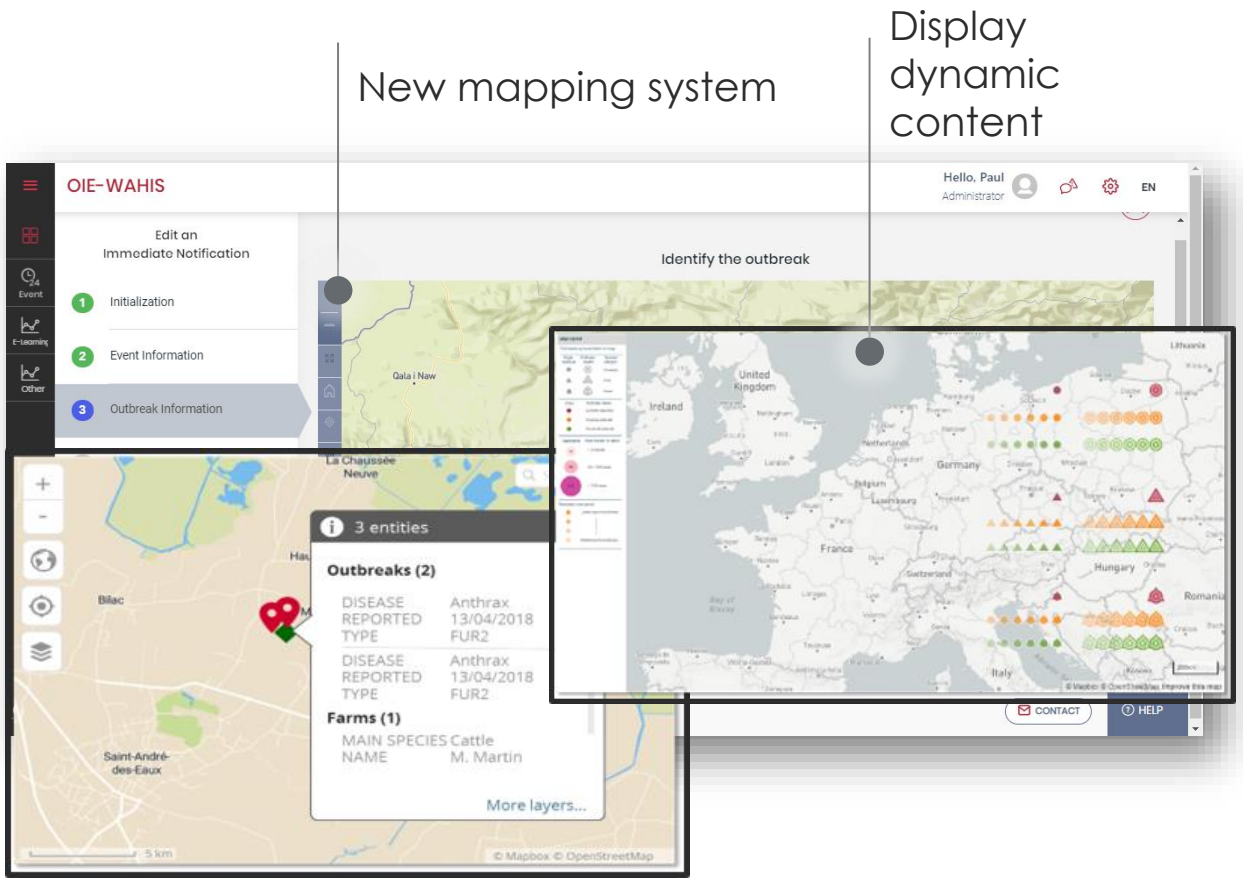
> Weekly FUR reports in one click

Easier **localization of outbreaks** and better **data display**

> Mapping system completely re-designed and interactive

> Dynamic display of outbreak and background information

> Improved GIS functionalities, more accurate localization



OIE-WAHIS new functionalities: analytics

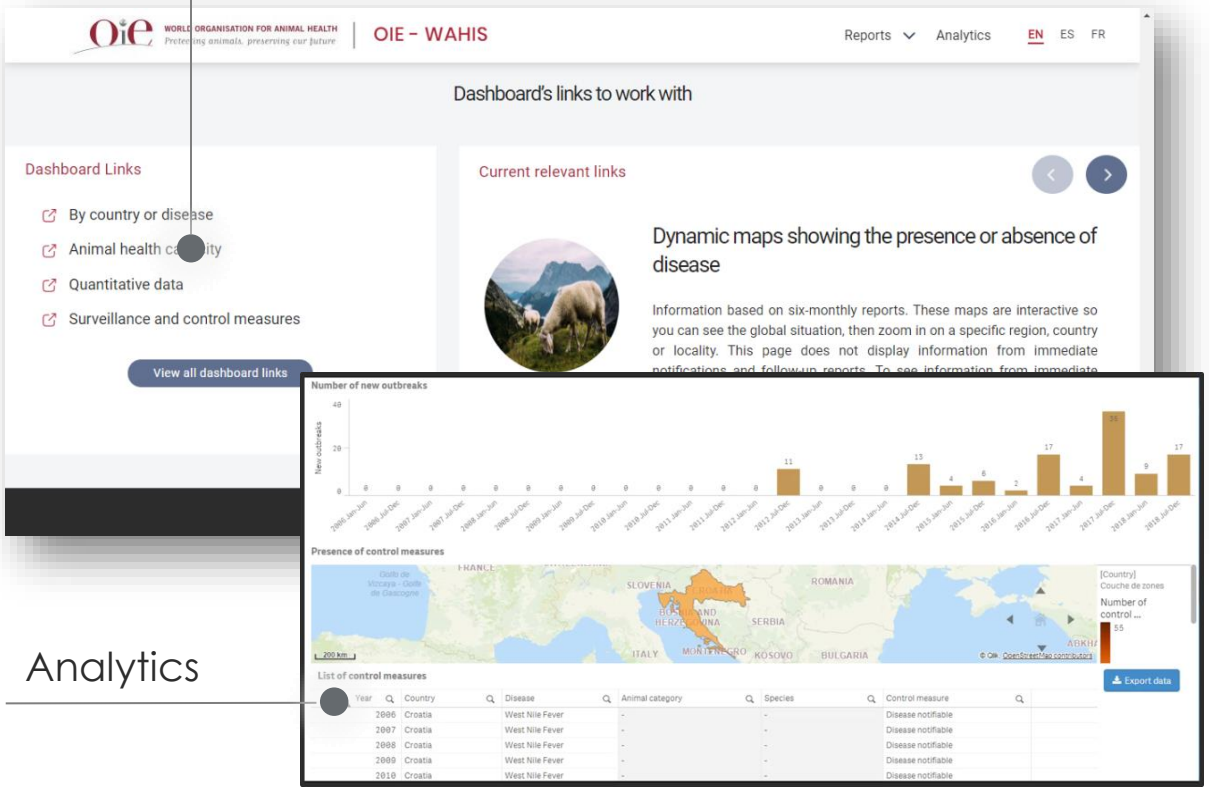
A dedicated interface for consulting users allowing for better visibility, exposure and transparency

> Standard report for country information available in one click (quick and simple)

> Pre-formatted and personalized dashboards

> National/regional animal health situations can be instantly monitored by consulting users

Several dashboards



Analytics

Update on OIE-WAHIS module for wildlife

Annual report on wildlife non-OIE listed diseases: development expected in 2022

Terrestrial and aquatic

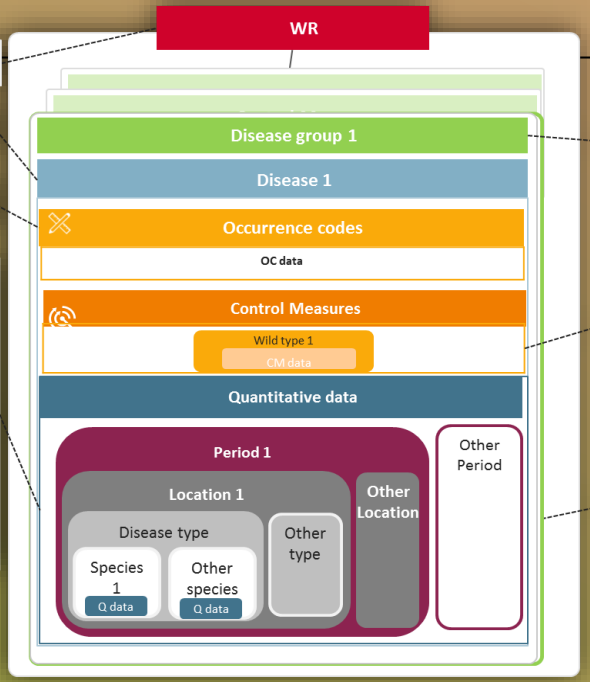
N non OIE listed diseases

1 occurrence code for each disease

1 set of quantitative data based on:
- Reporting period
- Reporting location

Disease types can include strains.

Species are organized through different sub-levels. For example: wildtype / order / family / species



M disease groups

1 set of control measures data for each wild type for each disease.

The quantitative data are composed of:
- Measuring units,
- Susceptible,
- Cases,
- Deaths,
- …

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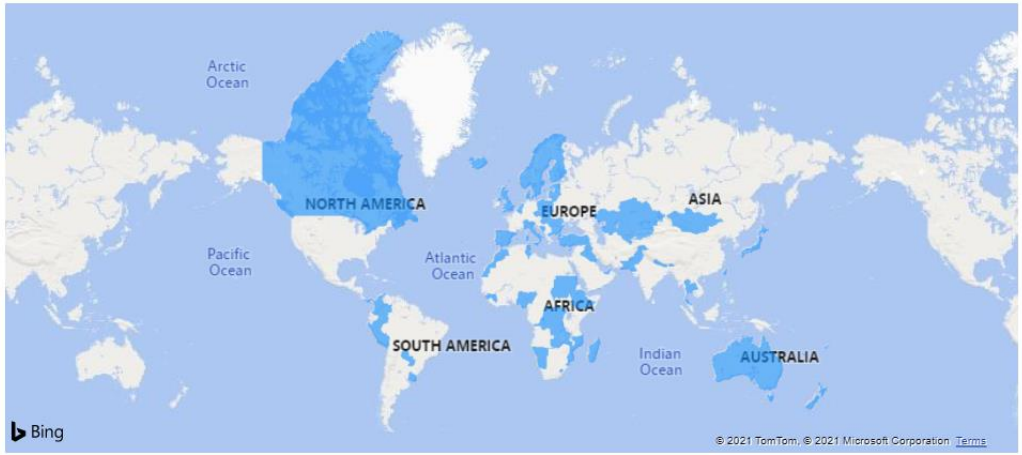
Disease reporting and link to six-monthly reports

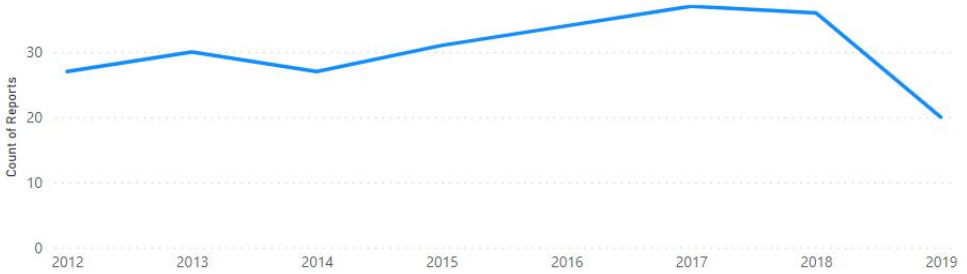
ANNUAL REPORT OF NO-OIE LISTED DISEASES IN WILDLIFE

YEAR

2012 2019

YEAR	Number of reports
2017	37
2018	36
2016	34
2015	31
2013	30
2012	27
2014	27
2019	20
Total	**242**





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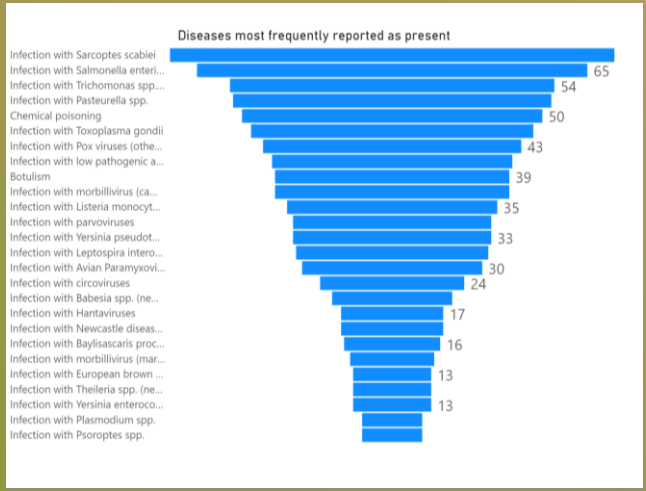
Disease prioritization

Analysis of 3 years of WAHIS data (2017 – 2019)

Disease status

Disease name	Present	Absent	Noinfo
Agent causing chronic wasting disease (CWD)	3%	85%	11%
Algal toxicosis	5%	59%	36%
Botulism	29%	50%	21%
Chemical poisoning	28%	36%	36%
Equine influenza (wild equidae)	2%	77%	21%
Infection with Alcelaphine herpesvirus 1 or Ovine herpesvirus 2	1%	64%	35%
Infection with Avian Paramyxoviruses (other than those listed by the OIE)	21%	46%	33%
Infection with Babesia spp. (new or unusual occurrences)	17%	58%	25%
Infection with Baylisascaris procyonis	10%	66%	24%
Infection with Borrelia spp.	6%	57%	37%
Infection with circoviruses	21%	46%	33%
Infection with Crocodilepox virus (Papillomatosis in crocodiles)	0%	64%	36%
Infection with elephant endotheliotropic herpesviruses (EEHV)	5%	60%	35%
Infection with encephalomyocarditis virus	3%	54%	44%
Infection with European brown hare syndrome virus	8%	67%	25%
Infection with Fasciola gigantica	4%	62%	35%
Infection with Fascioloides magna	5%	53%	41%
Infection with feline leukaemia virus (FeLV)	13%	57%	30%
Infection with filoviruses	3%	76%	22%
Infection with flavivirus (causing louping ill)	0%	63%	37%
Infection with flavivirus (causing tick borne encephalitis)	3%	64%	33%
Infection with Flavivirus (causing yellow fever)	1%	66%	33%
Infection with Hantaviruses	11%	56%	33%
Infection with Henipaviruses (Hendra viruses)	2%	61%	37%

Reported diseases



Disease surveillance

Disease name	Active	Passive
Agent causing chronic wasting disease (CWD)	8%	41%
Algal toxicosis	1%	27%
Botulism	7%	37%
Chemical poisoning	4%	31%
Equine influenza (wild equidae)	1%	36%
Infection with Alcelaphine herpesvirus 1 or Ovine herpesvirus 2	2%	27%
Infection with Avian Paramyxoviruses (other than those listed by the OIE)	2%	27%
Infection with Babesia spp. (new or unusual occurrences)	1%	31%
Infection with Batrachochytrium salamandrivorans sp.	0%	20%
Infection with Baylisascaris procyonis	2%	29%
Infection with Borrelia spp.	1%	24%
Infection with Calicivirus in marine mammals	0%	24%
Infection with circoviruses	4%	27%
Infection with Crocodilepox virus (Papillomatosis in crocodiles)	1%	26%
Infection with elephant endotheliotropic herpesviruses (EEHV)	1%	18%
Infection with encephalomyocarditis virus	1%	19%
Infection with European brown hare syndrome virus	1%	28%
Infection with Fasciola gigantica	1%	25%
Infection with Fascioloides magna	1%	24%
Infection with feline leukaemia virus (FeLV)	1%	29%
Infection with filoviruses	1%	32%
Infection with flavivirus (causing louping ill)	1%	26%
Infection with flavivirus (causing tick borne encephalitis)	1%	29%
Infection with Flavivirus (causing yellow fever)	1%	33%

Technical disease cards

Agent causing chronic wasting disease (CWD)

Agent causing chronic wasting disease (CWD)

Technical disease card

CHRONIC WASTING DISEASE

AETIOLOGY

Classification of the causative agent

Chronic wasting disease (CWD) is a contagious prion disease of free-ranging and captive deer, elk, and moose. The cellular prion protein (PrP^{C}) serves as the normal host-encoded cellular prion protein. It is when PrP^{C} directly binds to the misfolded isoform PrP^{Sc} that PrP^{C} adopts the disease-associated conformation. Normal prion proteins can be found most abundantly in the brain and spinal cord.

CWD is a member of the transmissible spongiform encephalopathy (TSE) family of prion diseases, and it is believed there are multiple strains within the United States as well as a strain unique to Norway.

Resistance to physical and chemical action

Temperature:	Highly resistant to heat and radiation (UV, microwave, ionising); inactivation by autoclaving at 134°C (273°F) for 18 minutes at 30 lb/in^2 is suitable, but parameters may vary pending type of sample contaminated.
pH:	Bioavailability of the CWD prion in soil is greater when pH>6.6.
Chemicals/Disinfectants:	Highly resistant to chemical inactivation and few disinfectants effectively inactivate them; primarily, 50% concentrated household bleach with a contact time of 30-60 minutes or sodium hydroxide for 60 minutes are recommended, but concentrations and contact times may vary pending the type of sample contaminated.
Survival:	Remains viable for long periods in fluids, faeces and tissues; persists in soil; partially resistant to protease digestion and can accumulate within neurones, eventually causing neuronic death.

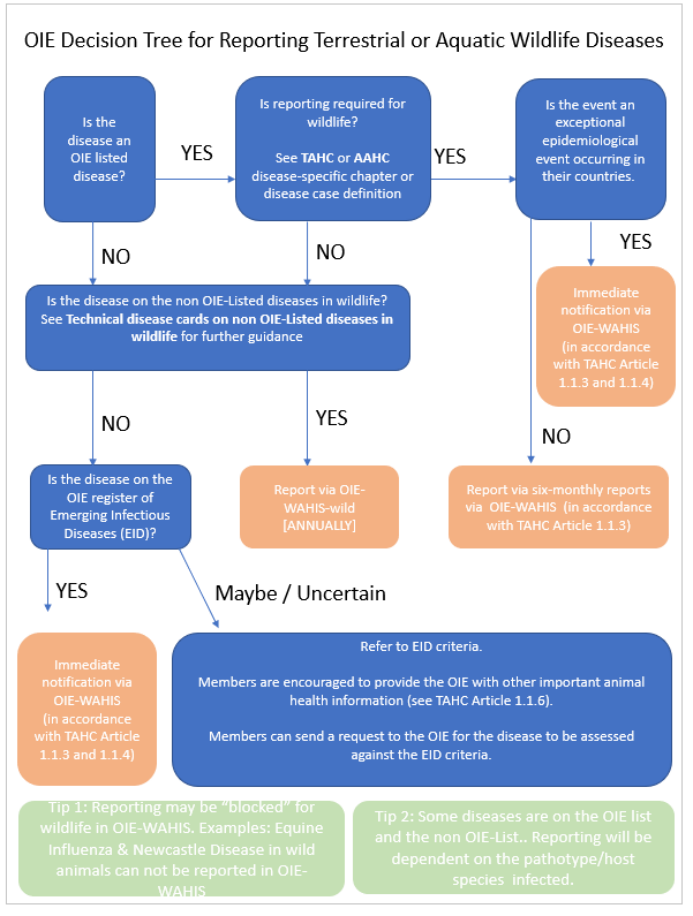
EPIDEMIOLOGY

Hosts

- It is known to affect multiple cervid species including but not limited to: elk (*Cervus canadensis*), moose (*Alces alces*), mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus virinianus*), and reindeer (*Rangifer tarandus*).

Transmission

Decision tree



Excel table for data collection

1) Presence / absence of non OIE-Listed wild diseases/infections

In the tab called "Help" you can find the notes for filling in this questionnaire

Disease occurrence code: When you put your mouse on this cell a *dynamic drop-down list* is meant to help you

(c) **Control Measures**: Please mark with an X the ones that your country implements for each disease

YEAR 2019

Non-listed pathogens and other disease-causing agents in wildlife	Disease occurrence code [a]	Date of last occurrence [b]	Disease notification (*)	Precautions at the border (Qf)	Monitoring (M)	Screening (Te)	General surveillance (GSu)	Targeted Surveillance (Tsu)	Movement control inside the country (Qi)	Slaughter (A)	Ante and post-mortem inspections (In)	Stamping out (S)	Selective killing and disposal (Sd)	Zoning (Z)	Compartmentalisation (Cp)	Vaccinatio prohibite (Vp)
Agent causing chronic wasting disease (CWD)																
Inf. with low path. avian influ. viruses (all subtypes)																
Infection with Alcelaphine herpesvirus 1 or Ovine herpesvirus 2																
Infection with Babesia spp. (new or unusual occurrences)																
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Infection with hantaviruses																
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Infection with Henipaviruses (Nipah viruses)																
Infection with Immunodeficiency viruses (Feline, Simian)																
Infection with Leptospira interogans ssp.																
Infection with Listeria monocytogenes																
Infection with Lyssaviruses other than Rabies virus (formerly referred to as classical rabies virus, genotype-1)																
Infection with morbillivirus (canids and felids)																
Infection with morbillivirus (marine mammals)																
Infection with morbillivirus in non-human primates																
Infection with morbilliviruses in other taxonomic groups of hosts																

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Protecting animals, preserving our future

WEBINAR

Regional Training of National OIE Focal Points for Wildlife

Intermediate cycle training round

20 - 25 September | **2021**

Thanks for your attention

If you have further questions, please contact us at: information.dept@oie.int

Paolo TIZZANI
World Animal Health Information and Analysis Department

WORLD ORGANISATION FOR ANIMAL HEALTH

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OIE-WAHIS: Reporting to the OIE and training resources

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Matteo MORINI
Madison WIMMERS
World Animal Health Information and Analysis Department

CONTENTS

- Role of the Focal Point on Wildlife in disease reporting
- OIE-WAHIS reports
- OIE-WAHIS training resources

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Role of the Focal Point on Wildlife in disease reporting

Support collection and submission of wildlife disease information to the OIE:

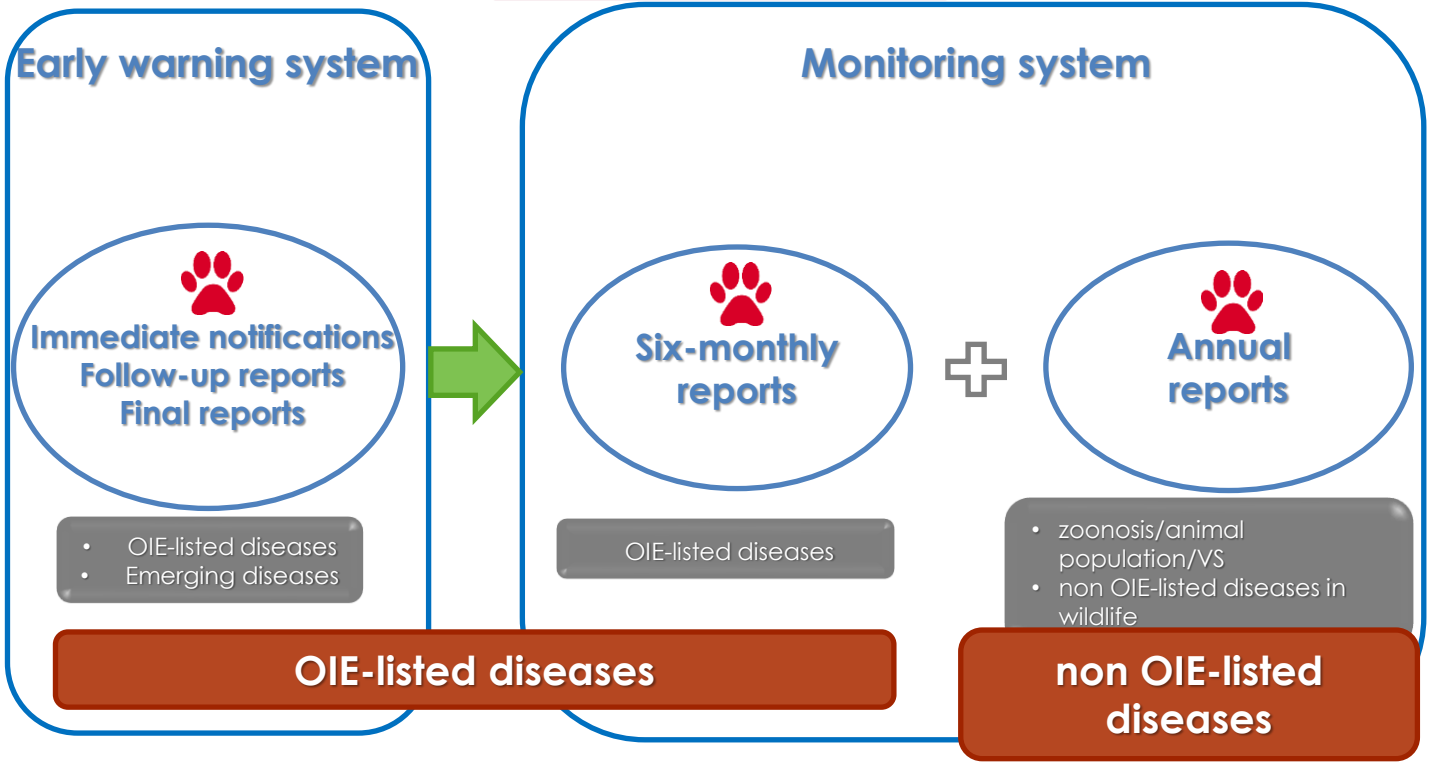
- OIE-listed diseases in wildlife
- non-OIE listed diseases in wildlife

Establish a network in the country

CONTENTS

- Role of the Focal Point on Wildlife in disease reporting
- **OIE-WAHIS reports**
- OIE-WAHIS training resources

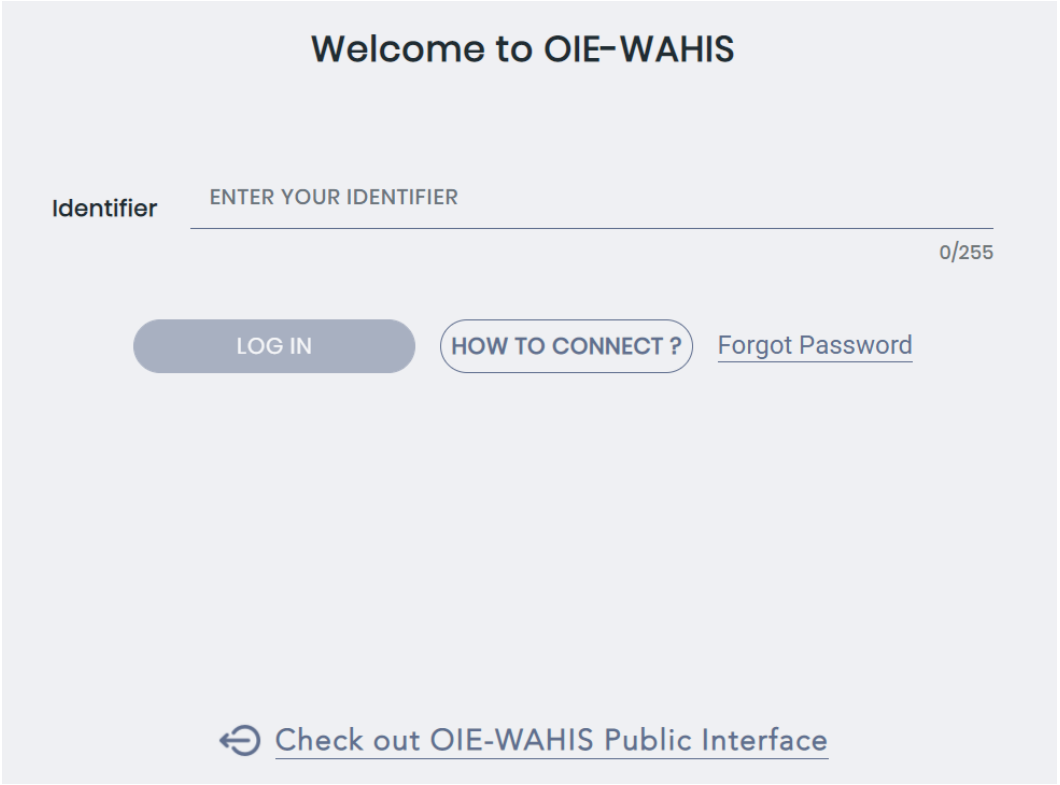
OIE-WAHIS



https://www.oie.int/en/what-we-do/animal-health-and-welfare/animal-diseases/

How to access OIE-WAHIS?

https://wahis.oie.int/#/login



CONTENTS

- Role of the Focal Point on Wildlife in disease reporting
- OIE-WAHIS reports
- OIE-WAHIS training resources

Notification procedures

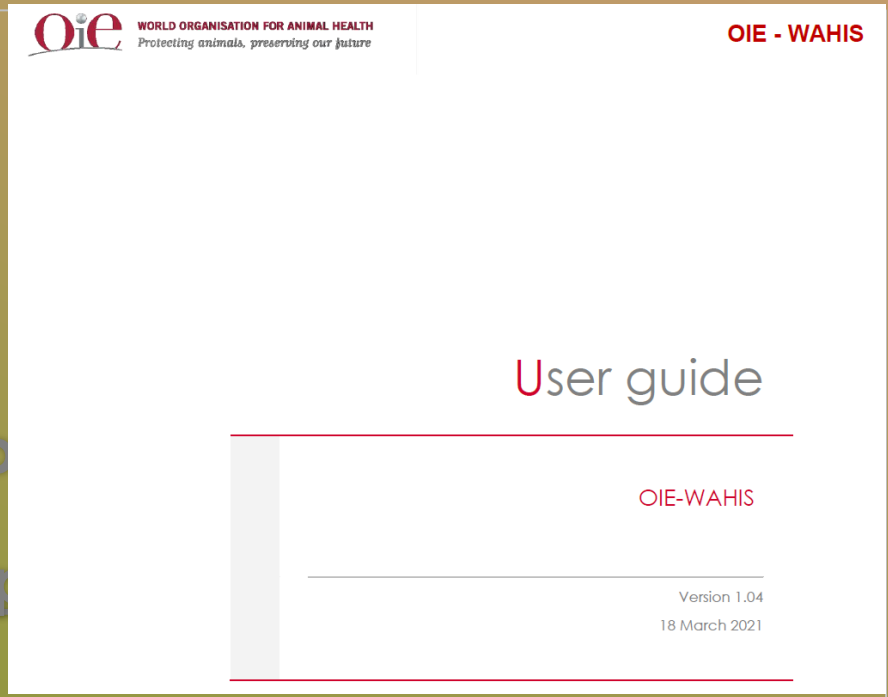
- Harmonised with the Codes
- Available on the OIE Delegate website and OIE-WAHIS

If you need these procedures:

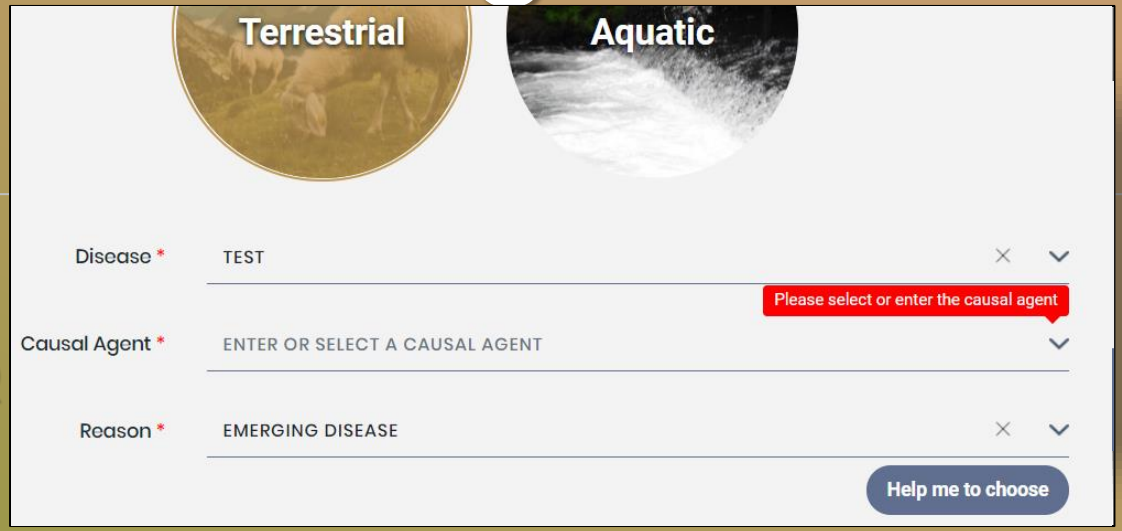
Contact us: information.dept@oie.int

OIE-WAHIS training resources

- User guide
- Tooltips
- E-learning
- Face to face training co
- Direct support wahis-sup



OIE-WAHIS training resources



- User guides
- Tooltips & FAQ
- E-learning
- Face to face training courses & webinars
- Direct support (wahis-support@oie.int)

OIE-WAHIS training resources

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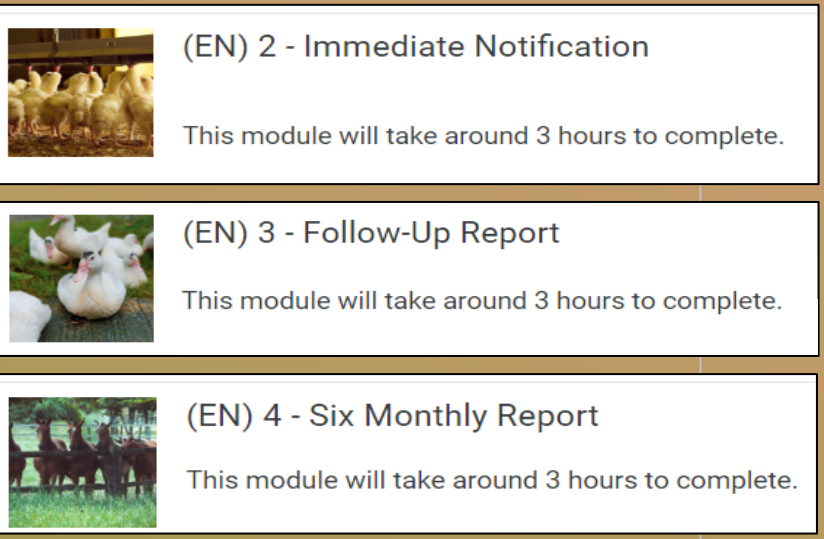

Detailed practical exercises
Case studies
Bonus data entry exercises

OIE-WAHIS training resources

- User guides
- Tooltips
- E-learning
- Face to face training courses & webinars
- Direct support (wahis-support@oie.int)

Conclusions

- OIE-listed and non OIE-listed diseases
- OIE-WAHIS training resources
- We still need you…

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