World Organisation for Animal Health
Founded as OIE

Reporting to the World Animal Health Information system:

Official data and Epidemic intelligence activity

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WAHIAD

Australian Aid

World Organisation for Animal Health
Founded as OIE

WAHIS

Reports Analytics EN ES FR

World Animal Health Information System

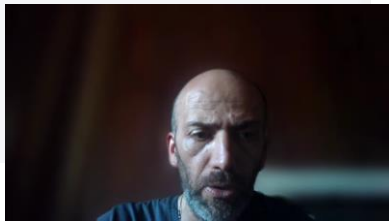
OIE-WAHIS (OIE World Animal Health Information System) is a unique comprehensive database through which information on the animal health situation worldwide is reported and disseminated throughout the world. OIE-WAHIS data reflects the information gathered by the Veterinary Services from OIE Members and non-Members Countries and Territories on OIE-listed diseases in domestic animals and wildlife, as well as on emerging diseases and zoonoses.

All this information can be publicly accessed and visualized on this interface. OIE-WAHIS replaces and significantly extends the former web interface named WAHIS providing access to all reported data since 2005. This new public interface includes data extraction tools, interactive mapping tools and dashboards to support data consultation, visualization and extraction of officially validated animal health data.

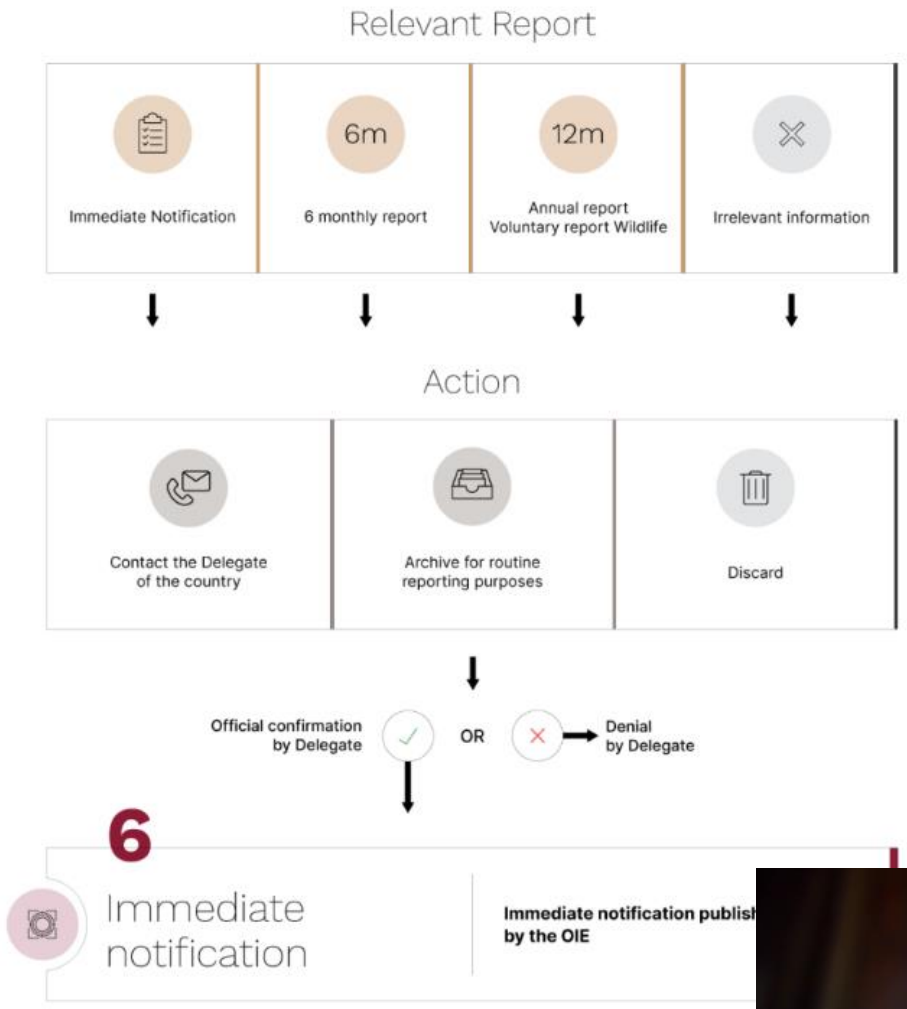
How would you like to consult the information ?

Analytics >

by Report >



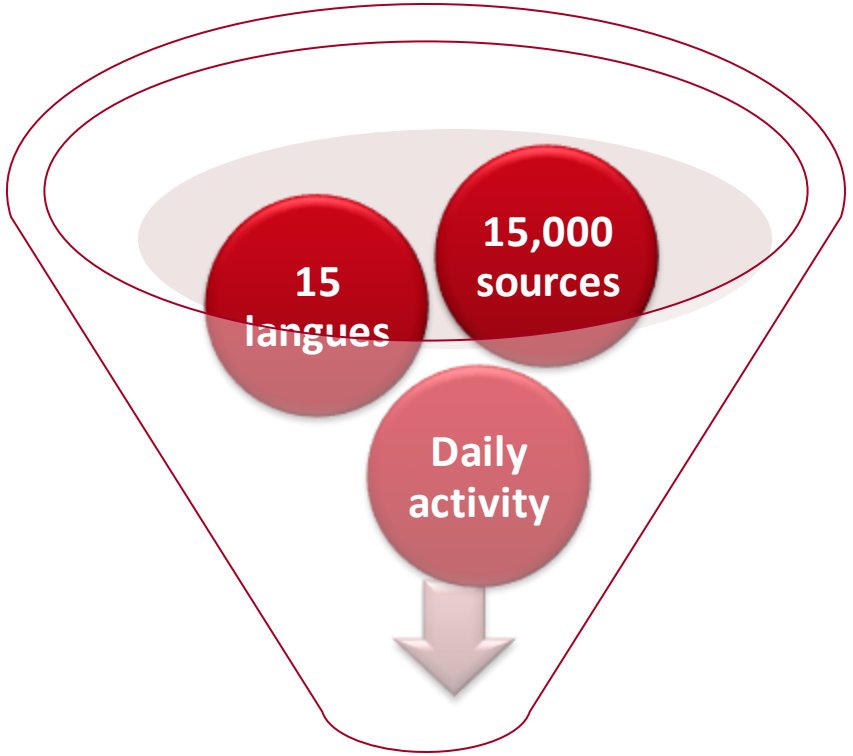
Data verification workflow

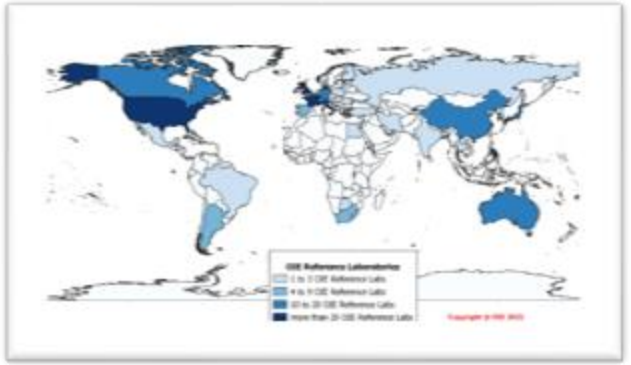


Epidemic intelligence (EI) activity – source of data

EIOS EPIDEMIC INTELLIGENCE FROM OPEN SOURCES

GLEWS platform Global Early Warning and Response System for Major Animal Diseases, including Zoonoses





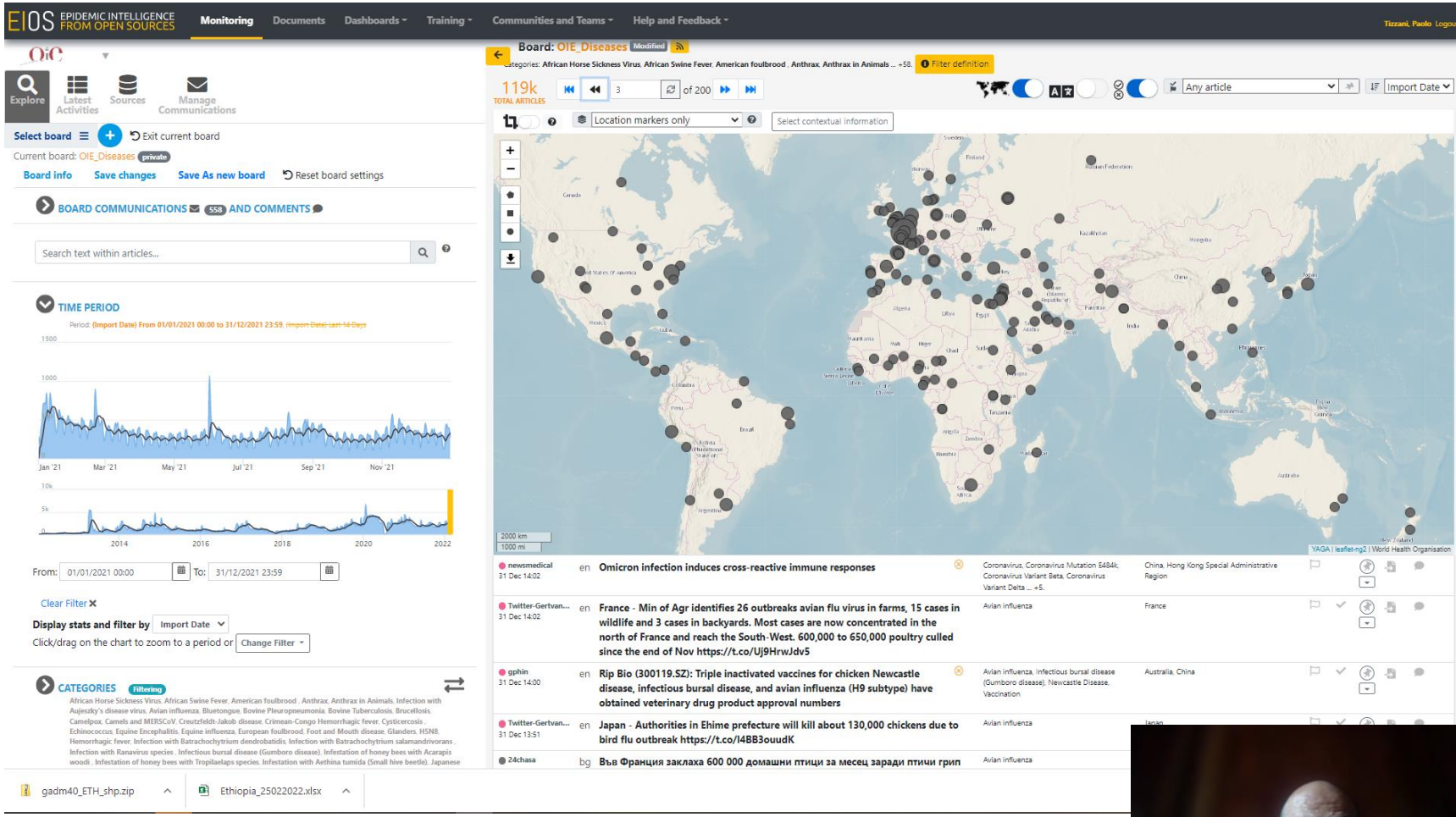
Source Intelliriver Source

IBIS (Australia)

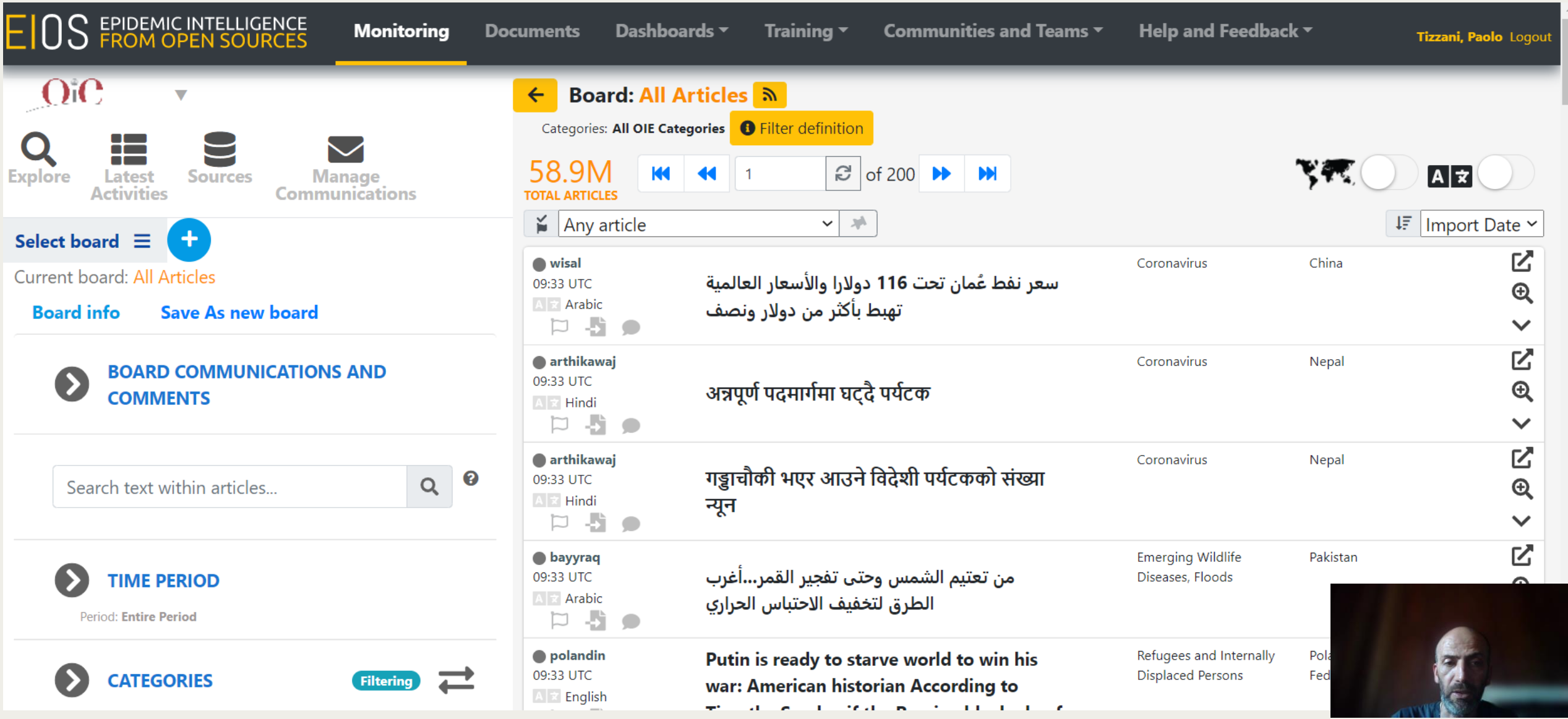
Reference laboratories (OIE network)

Improving the sensitivity of the system and accuracy of the information

- EIOS system for epidemic intelligence
- Daily screening of the web for all OIE-listed diseases (120,000 news screened in 2020)
- Constant communication between OIE and Members
- Around 10% of Immediate notification submitted thanks to active search of rumours



EIOS system


EIOS EPIDEMIC INTELLIGENCE FROM OPEN SOURCES
Monitoring
Documents
Dashboards
Training
Communities and Teams
Help and Feedback
Tizzani, Paolo Logout
Explore
Latest Activities
Sources
Manage Communications
Select board
Current board: All Articles
Board info
Save As new board
BOARD COMMUNICATIONS AND COMMENTS
Search text within articles...
TIME PERIOD
Period: Entire Period
CATEGORIES
Filtering
Board: All Articles
Categories: All OIE Categories
Filter definition
58.9M
TOTAL ARTICLES
1
of 200
Any article
Import Date
wisal
09:33 UTC
Arabic
سعر نفط عُمان تحت 116 دولارا والأسعار العالمية تهبط بأكثر من دولار ونصف
Coronavirus
China
arthikawaj
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Hindi
अन्नपूर्ण पदमार्गमा घट्दै पर्यटक
Coronavirus
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Hindi
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Coronavirus
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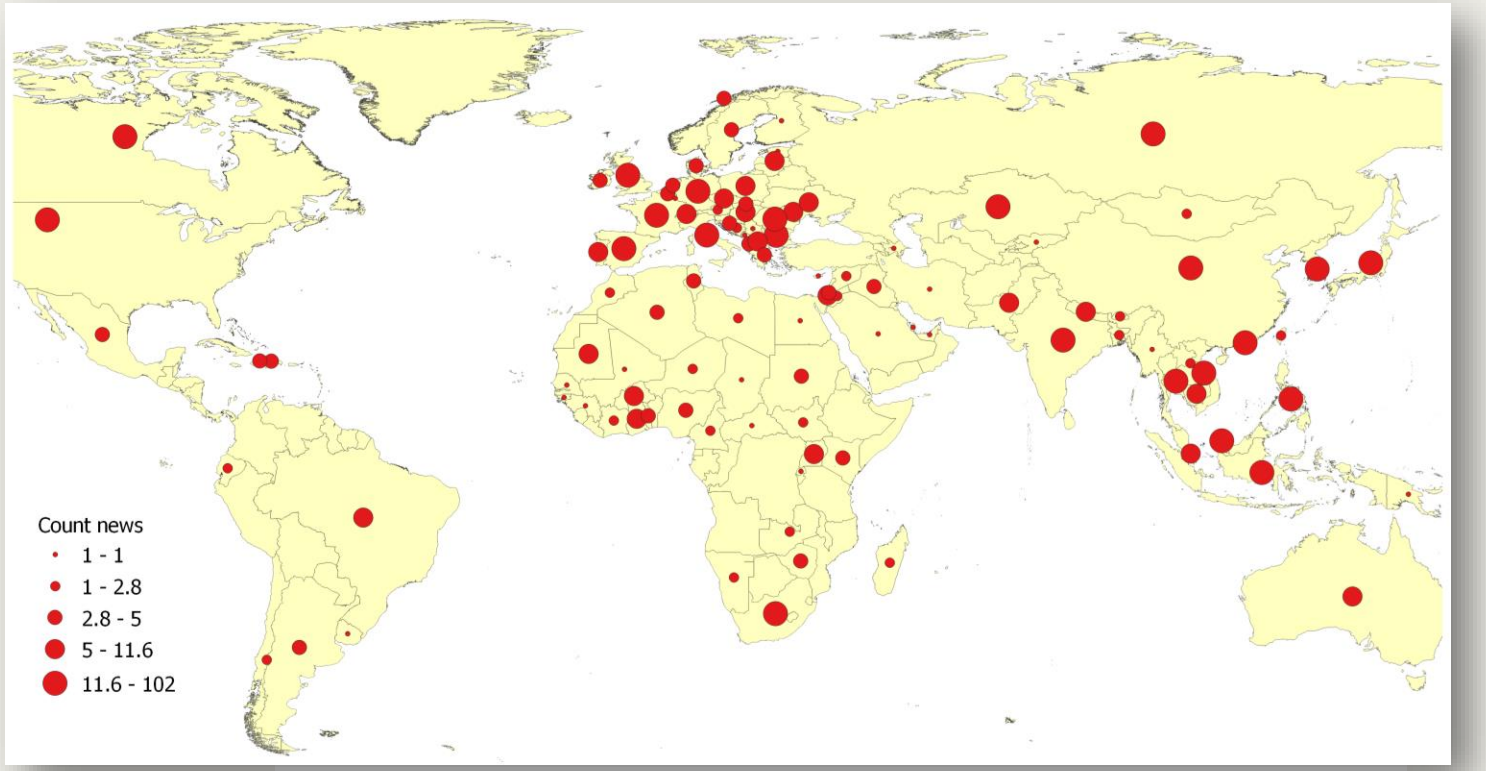
Arabic
من تعتيم الشمس وحتى تفجير القمر...أغرب الطرق لتخفيف الاحتباس الحراري
Emerging Wildlife Diseases, Floods
Pakistan
polandin
09:33 UTC
English
Putin is ready to starve world to win his war: American historian According to
Refugees and Internally Displaced Persons

Algorithms implemented

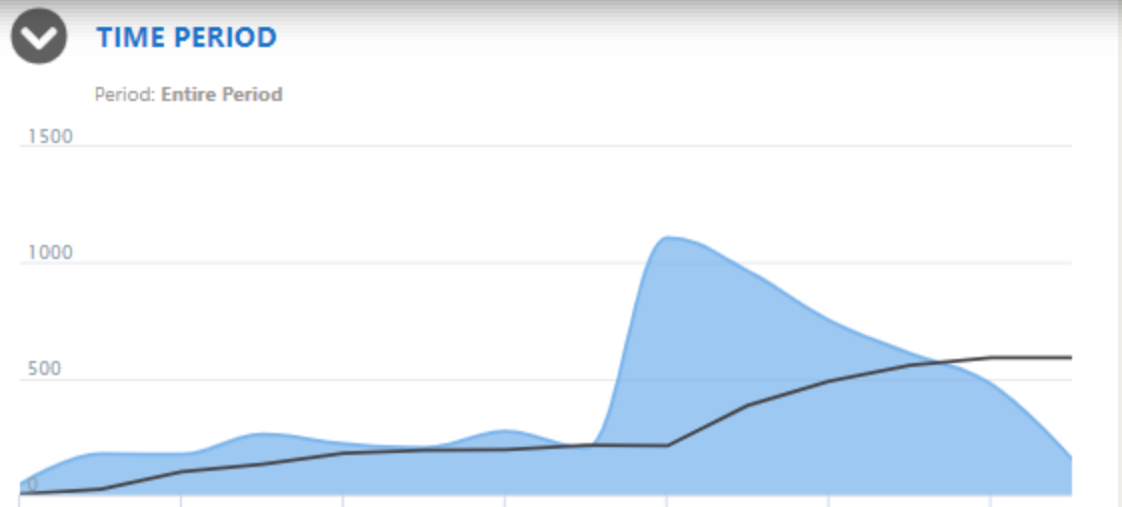
categories

categories

- All OIE Categories
  (11 of 395 categories selected)
  - Biological — 222k
    (10 of 114 categories selected)
    - Babesiosis — 49
    - Baylisascaris — 0
    - Chronic Wasting Disease — 12
    - Emerging Wildlife Diseases — 1.1k
    - Filovirus — 14
    - Louping ill — 0
    - Rinderpest — 6
    - White-nose syndrome — 10
    - Yersinia Enterocolitica — 5
    - Yersinia Pseudotuberculosis — 1
  - zAll Hazards Threats (optional) — 29.5k
    (1 of 145 categories selected)
    - Emerging Wildlife Diseases — 1.1k



5.6k
TOTAL ARTICLES



Assessing the sensitivity of WAHIS using epidemic intelligence data

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ORIGINAL ARTICLE

WILEY

Sensitivity of an international notification system for wildlife diseases: A case study using the OIE-WAHIS data on tularemia

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Abstract

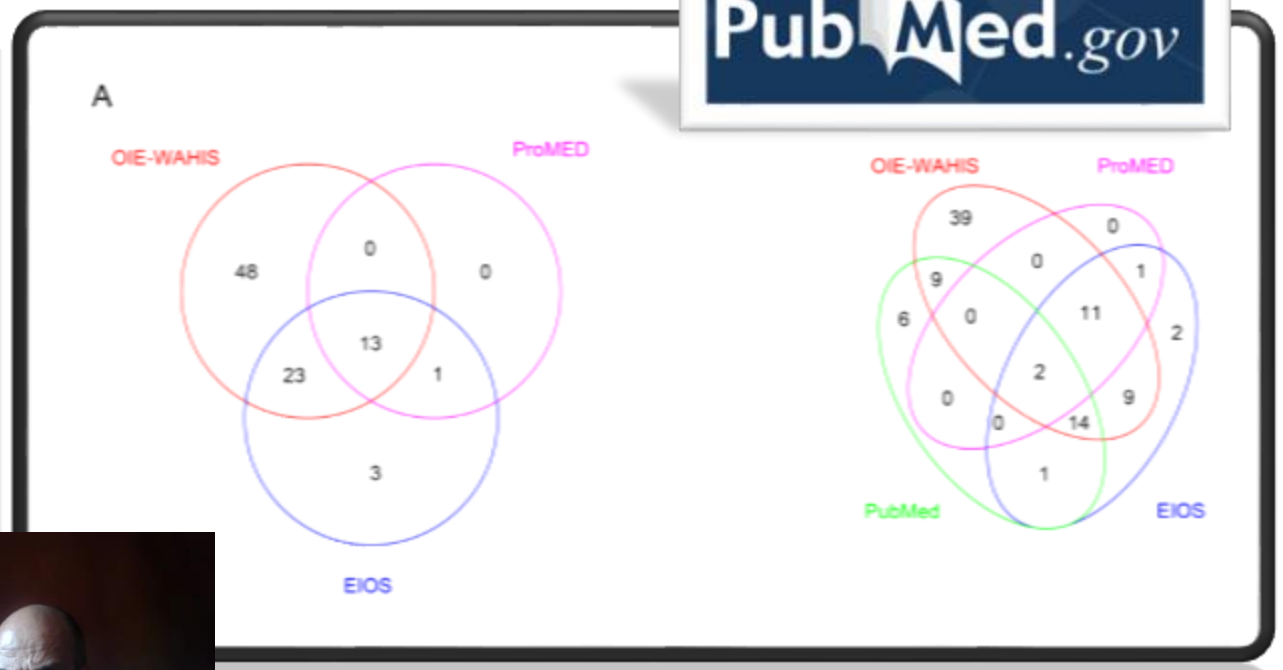
The World Organization for Animal Health (OIE) has recently developed a Wildlife Health Framework to respond to the need of members to manage the risk from emerging diseases at the animal–human–ecosystem interface. One of its objectives is to improve surveillance systems, early detection and notification of wildlife diseases. Members share information on disease occurrence by reporting through the OIE World Animal Health Information System (OIE-WAHIS—formerly known as 'WAHIS'). To evaluate the capacity of a surveillance system to detect disease events, it is important to quantify the gap between all known events and those officially notified to the OIE. This study used capture–recapture analysis to estimate the sensitivity of the OIE-WAHIS system for a OIE-listed wildlife disease by comparing information from publicly available sources to identify undetected events. This article presents a case study of the occurrence of tularemia in lagomorphs among selected North American and European countries during the period 2014–2019. First, an analysis using three data sources (OIE-WAHIS, ProMED, WHO-EIOS [Epidemic Intelli
Sources]) was conducted. Subsequent analysis then explored the
information from a fourth source (scientific literature collected in Pu

OIE WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future
OIE-WAHIS

EIOS
EPIDEMIC INTELLIGENCE FROM OPEN SOURCES

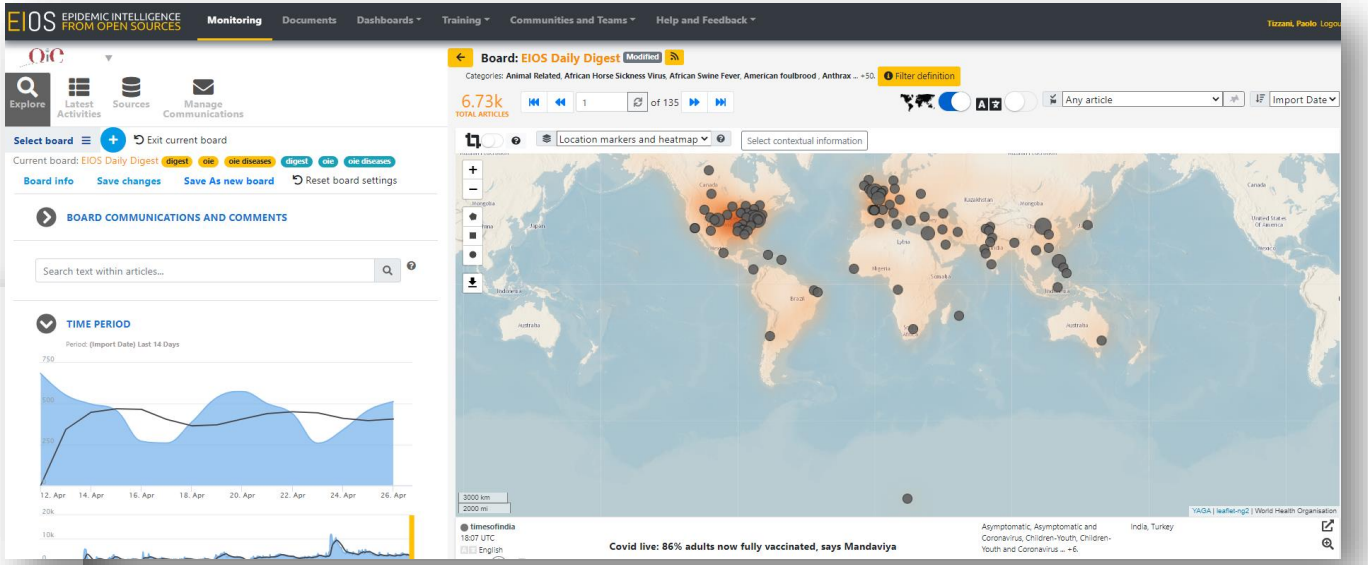
ProMED
INTERNATIONAL SOCIETY FOR INFECTIOUS DISEASES

PubMed.gov



A pioneering approach for diseases risk mapping using data from EIOS: CCHF case study

EIOS
EPIDEMIC INTELLIGENCE FROM OPEN SOURCES



Methods in Ecology and Evolution
BRITISH ECOLOGICAL SOCIETY

APPLICATION | Free to Read

embarcadero: Species distribution modelling with Bayesian additive regression trees in R

Colin J. Carlson

First published: 14 March 2020 | https://doi.org/10.1111/2041-210X.13389 | Citations: 13

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Abstract

1. `embarcadero` is an R package of convenience tools for species distribution modelling (SDM) with Bayesian additive regression trees (BART), a powerful machine learning approach that has been rarely applied to ecological problems.
2. Like other classification and regression tree methods, BART estimates the probability of a binary outcome based on a set of decision trees. Unlike other methods, BART iteratively generates sets of trees based on a set of priors about tree structure and nodes, and builds a posterior distribution of estimated classification probabilities. So far, BARTs have yet to be applied to SDM.
3. `embarcadero` is a workflow wrapper for BART species distribution models, and

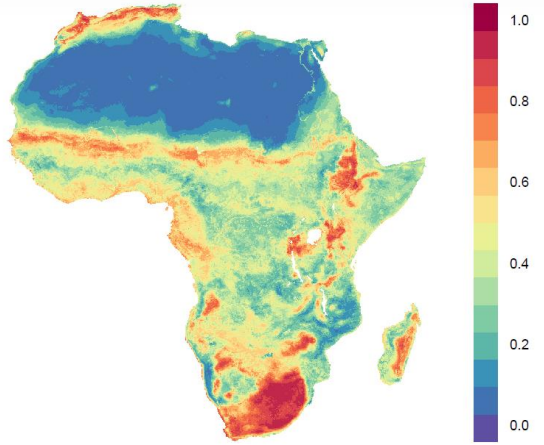
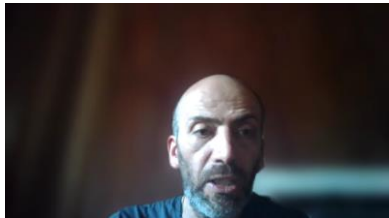


Figure 4: A map of Crimean-Congo haemorrhagic fever transmission ri
using ecological niche modelling with BART (see Supplementary Materia

Opportunities, gaps, and challenges

- **Opportunities:**
  - **Having a centralized and standardized reporting system for diseases in wildlife**
  - **Legal framework and standards on animal diseases**
  - **Improved sensitivity for occurrence of diseases in wildlife**
- **Gaps and challenges:**
  - **sensitivity of the system for some diseases**
  - **some communication gaps among relevant stakeholders / institutions**



Thank you

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