WOAH’s epidemic intelligence for decision making

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1. Epidemic intelligence and WOAH’s mission of transparency
Imagine a world where...

Countries do early detection but...

Do not systematically share official information

HPAI events are kept secret fearing for consequences and no one knows

Gaps in information

Media talking about HPAI spread between mammals based on a hypothesis before scientific confirmation

Misinformation

Deliberate release of false information on fake HPAI events to create panic

Disinformation
1924:
The founding Members entrusted WOAH with the mission of ensuring transparency of the global animal disease situation and committed themselves to the legal obligation to report...
One source of information?

Possible gaps when relying on official notification only:

E.g.

Significant HPAI wild bird mortality event in a country

National Focal Point in charge of notification has been recently appointed and does not understand that wildlife is in the scope of mandatory reporting

WOAH not aware, information not confirmed with official authorities and not communicated to the public

That is why, 20 years ago, WOAH Members gave the organisation the mandate of conducting epidemic intelligence.
“Cycle of organised and systematic collection, analysis and interpretation of information from all sources to enhance early detection of health events and early warning for timely response, based on an adequate assessment of the associated risk”
World of interconnected data
World of interconnected data

- In today's world, information systems are highly **Interconnected** and **Interdependent**
- Systems have different scopes and processes, which leads to **specific limitations and added values**
- **Crossing information** provides a more accurate picture of reality
- WOAH and its Members are a key source of information for other systems & other systems are of primary importance for **cross-checking** the information received at WOAH
- Data exchange is also essential for analysis and **information for decision makers**
Fast evolution of epidemic intelligence in WOAH

20 years of

- Information exchange
- Signal detection technology
- WOAH resources for this activity (human resources, networks, systems)
2. How WOAH is using epidemic intelligence for early detection and warning
Typology of sources considered within epidemic intelligence in WOAH

In 2022 – information collected on 120 listed diseases and 4 emerging diseases

182 Members reporting information through WAHIS

120 000 Signals detected through web scraping

334 Reference Centers sharing information with WOAH & WOAH network of partners with regular or ad hoc information exchange
RISK OF INFOBESITY!
How do we get the useful information from all the signals?

- **WOAH standards** defines information related to stable situations vs **exceptional events**
- Internal process to **treat signals of unofficial information**
- Systematic **validation of Information with Members**
- **WOAH gets support from its network of experts** to understand and communicate on disease situations
- Consider contextual data, drivers' data & indirect signals to **assess risks**
### Value of the types of sources considered within epidemic intelligence in WOAH

#### Examples for HPAI in 2022

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alerts spontaneously submitted by National Authorities</td>
<td>183</td>
</tr>
<tr>
<td>Alerts submitted by National Authorities after WOAH request based on web scraping</td>
<td>8</td>
</tr>
<tr>
<td>Meetings between WOAH and OFFLU expert network to discuss One Health epidemiological information including molecular and vaccination issues</td>
<td>22</td>
</tr>
<tr>
<td>Meetings of FAO–WOAH–WHO Global Early Warning System for health threats and emerging risks at the human–animal–ecosystems interface</td>
<td>12</td>
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3. What decisions can be taken based on this information?
For Members

• **National authorities** can take decisions and implement actions to assess risk, get prepared to avoid spread of pathogens or mitigate event introduction

• **Private sector**, for example designing Poultry Insurance Scheme
For WOAH

- **Preparedness**: identification of threats and needs for urgent regional & global coordination, guidance to Members
- Periodical re-assessment of the priorities and **needs for updates** of Standards, guidance, activities, and processes
For WOAH partners

• **Early warning & response**, WOAH linking with INTERPOL

• **Intersectoral collaboration** (One Health)
For the general public

- WOAH provides reference information
- Fights against misinformation / disinformation
3. Conclusions
Conclusions

- WOAH maintains its **role and responsibility** in publishing only the reference information validated by official authorities.

- Comparison with other sources allows to **identify data limitations** and WOAH & Members can act.

- WOAH provides **context to the information** presented (stable situations vs exceptional events).

- 20 years of epidemic intelligence evolution in WOAH, going towards **One Health Epidemic Intelligence**?

- Essential for early detection, warning and allowing all actors to implement **timely decisions to reduce disease impacts**.
Thank you

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