

Deciphering OIE Animal Disease Reports



A key mission of the OIE is to provide high quality animal diseases information to all stakeholders including veterinary services, international organisations, livestock owners, industry, academics, the media and the larger public.

In order to fulfil its mandate in this respect, the OIE manages the World Animal Health Information Database (WAHID) interface. This new extensive database is a milestone in OIE efforts to improve the transparency, efficiency and speed with which animal health information is disseminated throughout the world.


The database includes emergency notifications and animal health follow-up reports provided to the OIE by Member Countries using the World Animal Health Information System (WAHIS) web application. Members provide real-time information as they report on any relevant animal disease detected within their respective territories. An alert mechanism is in place to notify the international community of reports received.



When to report?

Over 100 animal diseases of significance are notifiable to the OIE and the following criteria guide the Members in determining when to report. Events considered significant and that require immediate notification by Members include the following:

- the first time an OIE-listed disease or infection is identified in a country or zone/compartments;
- the re-occurrence of a listed disease or infection following a report by the Member indicating that the previous outbreak(s) had been resolved;
- the first occurrence of a new strain of a pathogen of a listed disease in a country or zone/compartments;

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- a sudden and unexpected increase in morbidity or mortality caused by an existing listed disease;
 - an emerging disease with significant morbidity/mortality or zoonotic potential;
 - evidence of a change in the epidemiology of a listed disease (e.g. host range, pathogenicity, strain of causative pathogen), in particular if there is a zoonotic impact.

When an exceptional epidemiological event starts, the Member must send an immediate notification to the OIE. As the disease is dealt with, the affected country will then send follow-up reports describing progress and results of the applied control measures. Ideally, a final report will be submitted once the disease has been put under control and there are no new reported outbreaks.



Standard reporting format

The reports include the number of outbreaks reported for each disease, with the number of sick or dead animals. They also contain information on the diagnostic method used and the key prevention and disease control measures taken including the number of animals slaughtered or vaccinated.



Terminology Deciphered

Apparent morbidity rate or prevalence is the number of cases or outbreaks of the disease divided by the number of animals at risk of having the disease (to get sick). It gives an idea about how many animals are sick compared to the number of animals that are at risk of getting sick. The higher this number is, the more contagious the disease is considered to be.

Apparent mortality rate is the number of dead animals divided by the number of animals at risk of dying from the disease. It gives an idea about how much the disease kills.

Apparent case fatality rate is the number of dead animals compared to the number of sick animals. It gives an idea about how much the disease kills among the sick animals. The higher this number is, the higher the chance that sick animals will die from the disease.

The proportion susceptible removed is as described, the number of animals removed from the susceptible population either through death, destruction or slaughter. As part of a 'stamping out' disease control measure, actions are taken to reduce the spread of a disease by removing or reducing the size of the population at risk of getting the disease.

The apparent (or estimated) numbers can be different from the true prevalence of disease in a population due to several factors when testing groups of animals for disease:

- Not every animal that has died will necessarily be tested. This is particularly so in flocks of commercial birds. An adequate number of animals must be tested based on statistical principles.
- Accurate number of the total population is not always available.
- Characteristics of a diagnostic test (sensitivity and specificity) may provide false positive results [OIE recommended diagnostic tests](#) are chosen because they yield reliable results.
- The number of animals testing positive that are needed to classify a population as infected may vary.



Disease Free Status of a Country

The OIE is also responsible for compiling a list of Members or zones that are officially recognised as being free from certain diseases. [Official Recognition of Member Countries and Territories](#) is achieved by means of a clearly defined and impartial procedure in place that includes well-designed, science-based questionnaires.

This recognition procedure is currently in place for three (3) of the OIE listed diseases: Foot and Mouth Disease (FMD), contagious bovine pleuropneumonia (CBPP) and bovine spongiform encephalopathy (BSE). The procedure used to apply to a fourth disease, Rinderpest, which was eradicated in 2011 thanks to the combined effort of the OIE and the FAO, with other international partners.

Members can also declare themselves free of diseases for which there is, as yet, no specific procedure for obtaining Official OIE recognition of Member status. In this case, they must provide the relevant epidemiological information demonstrating compliance with the standards contained in the Terrestrial Animal Health Code.



Endemic Status of a Disease

In some cases, the results of applied control measures and evolution over time indicate that a disease has overwhelmed the capacity of a Member to completely eliminate the disease.

In this situation, the affected country will submit a final report identifying that the disease has become endemic. The country will continue to report on this disease not through follow-up reports but rather through reports submitted every six (6) months.

In other cases, a determination that a disease has become endemic may be made based on the evidence gathered by independent epidemiological experts on missions to an affected country.

More information:

1. OIE Listed Diseases
<http://www.oie.int/en/animal-health-in-the-world/oie-listed-diseases-2011/>
2. OIE Official Recognition of Member Countries and Territories
<http://www.oie.int/en/animal-health-in-the-world/official-disease-status/official-recognition-policy-and-procedures/>
3. OIE Recommended Diagnostic Tests
http://www.oie.int/en/international-standard-setting/terrestrial-code/access-online/?htmfile=chapitre_1.1.3.htm