

Notification of animal and human diseases: the global legal basis

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Summary

The successful control of a disease, and a possible epidemic, depends on rapid access to complete information on the disease situation. To ensure a timely response, diseases must be immediately notified in a transparent manner. The rapid exchange of information about animal diseases, including zoonoses, was the key objective in the establishment of the World Organisation for Animal Health (OIE) in 1924. For diseases concerning humans, a set of new rules dealing with the quick reporting of infectious diseases – the International Health Regulations – was adopted by Members of the World Health Organization (OMS) in 2005. The article explains these two systems of notification, which make information accessible to the public and allow decision-makers to better manage the risks related to the diseases concerned.

Keywords

Animal disease – Human disease – International standard – Notification – Zoonosis.

Introduction

The successful control of epidemics – whether human disease epidemics or animal disease epizootics – depends on rapid access to complete information on the national disease situation. People and goods now travel long distances in a very short time, thus creating enormous challenges that demand efficiency and speed of response on the part of both public health and veterinary authorities. To ensure a timely response, diseases must be immediately notified in a transparent manner.

Responsibility for disseminating disease information lies within the mandates of two global organisations: the World Health Organization (WHO) for diseases of humans and the World Organisation for Animal Health (OIE) for animal diseases, including animal diseases transmissible to humans (zoonoses).

For OIE Member Countries, the rapid exchange of information about animal diseases, including zoonoses, was the key objective in the establishment of the organisation in 1924. On the public health side, in 2005 the WHO States Parties updated and adopted a set of new rules dealing with the quick reporting of infectious diseases – the International Health Regulations (IHR 2005) (1) – to face the new challenges posed by the exponential increase in travel and freight, and as a result of experiences such as the epidemic of severe acute respiratory syndrome (SARS).

When comparing the effectiveness of the systems for the notification of transboundary diseases in animals and humans, the different contexts must be borne in mind.

People usually move freely and without health-related restrictions from one place to another, while the transport of live animals and animal products is closely regulated (although this does not mean that these rules are always respected everywhere).

Moreover, while people normally travel and cross international frontiers via controlled entry points, it is not possible to control the movement of wild animals, which can be carriers of highly contagious pathogens.

The notification of diseases may have a negative impact on the economic performance of a country (e.g. by causing loss of export markets or discouraging tourism). However, new information technologies and practices make it difficult for governments to hide occurrences of serious notifiable diseases. A country's credibility in terms of disease reporting is based on timely and accurate notification of diseases. Furthermore, if a government provides reports rapidly it is in a much better position to contain a disease, as it does not have to defend its failure to comply with international obligations. Regaining credibility in the face of public knowledge of failure to meet international rules is a costly and time-consuming exercise and can be of the highest political risk for policy-makers, particularly in democratic countries.

WHO notification system

As early as the 19th Century and during the 20th Century, international health conferences were held and conventions signed on the notification of human diseases such as cholera, plague and yellow fever.

In 1946, the WHO Constitution established responsibilities for the organisation in connection with combating infectious diseases. However, at that time, the only information that States Parties were obliged to transmit to the WHO were data that had already been published in their country.

Later, in 1951, the International Sanitary Regulations (which were renamed the International Health Regulations [IHR] in 1969) were adopted to provide an international legal framework to prevent and control the cross-border spread of communicable diseases. In 1995, Member States asked for a major change to these regulations, as they had become obsolete and were not coping with new challenges. New IHR were adopted in 2005, when WHO States Parties established (in Articles 6 to 11) an improved system for notification of communicable diseases. These regulations have been in force since June 2007.

Article 6 requires States Parties to report to the WHO, within 24 hours, all incidents that could be of international concern for public health emergencies. The information must be transmitted via IHR focal points using the fastest available means of communication. Subsequently, further detailed information should be sent promptly.

In accordance with Articles 9 and 10, the WHO can use other sources of information about diseases in Member States. In this case, the WHO is supposed to inform the respective State Party about these unofficial reports and try to obtain confirmation from the State Party before taking measures on the basis of this information. After this, information can be disseminated to all States Parties. Only in exceptional cases can the source of information be kept confidential.

If there is a threat of serious public health risks of international importance arising from non-cooperating countries, the WHO can disseminate information to other States Parties (Art. 10 para. 4).

Article 11 obliges the WHO to send all necessary information, confidentially and as quickly as possible, to the States Parties. For certain documents, there are additional conditions. The WHO is required to obtain information about an affected country in consultation with the latter. If other information about the same event has already become public and there is a need for dissemination of authoritative

information, the WHO may also make this information accessible to the general public.

OIE notification system

The circumstances of the establishment of the OIE highlight the importance to the founding countries of timeliness and transparency in sharing information on the international disease situation. In 1920, a shipment of Zebu cattle being moved from India to Brazil transited the port of Antwerp. The cattle were carriers of one of the deadliest diseases of livestock, rinderpest, which caused a devastating disease outbreak in Belgium.

It is worth noting that rinderpest has now almost been eradicated from the globe.

In 1924, the Secretary General of the League of Nations, the forerunner of the United Nations, initiated the creation of the *Office International des Epizooties* (OIE) in Paris. At this time, 28 countries established obligations – laid out in the founding documents – for reporting and sharing information on animal diseases. These obligations were for the founding States and all Members joining subsequently. The OIE now numbers 178 Members. From the beginning, both the Organisation and the Member Countries have had an unconditional duty to disclose all relevant information about animal diseases. These obligations are set out in the OIE Organic Statutes (the 'OIE constitution' [2]), signed, and ratified by the founding Member Countries, and are therefore a basic responsibility of the organisation and of all Members, including Members joining the organisation later. The Organic Statutes can be changed only by the unanimous decision of its current Members.

The collection and dissemination of facts and documents about the spread and control of diseases is one of the three activities that OIE Member Countries have identified as being key for the Organisation (the others being the promotion and coordination of international research into contagious diseases and the examination of draft international agreements on animal health measures) (Article 4).

Articles 37 and 38 of the General Rules of the OIE (established in 1973 [3]) give practical expression to the monthly reporting obligations contained in Article 10 of the Organic Statutes. The collection and publication of all facts and documents about diseases take priority over all the other objectives of the OIE. The OIE is obliged to send immediate reports to governments on emerging diseases and other significant epidemiological events. Additionally, the OIE has the obligation to publish periodic reports on the global animal disease situation and to disseminate them to all Member Countries.

Nowadays, the transmission of information by new communication technologies is more advanced and enables Members to send real-time notifications to the OIE. Members must report the occurrence of animal diseases listed by the OIE, the emergence of new diseases and significant epidemiological events within 24 hours of the event. The OIE's capacity to relay information about the global animal disease situation has been significantly accelerated and improved through the implementation of the World Animal Health Information System (WAHIS). This system allows all Members to transmit information electronically to an OIE Headquarters' server. The OIE has taken steps in recent years to improve disease notification of both domestic and wild animal diseases through increased surveillance and through information collected from Members, including data on family and species of wild animals.

Direct contact between the OIE and the Delegates of the Member Countries, who are usually the Chief Veterinary Officers, is an important prerequisite for the rapid transmission of information, as it ensures that OIE communications with its Member Countries are not limited to contacts through diplomatic channels (Article 2 of the OIE Organic Statutes). The international standards in the OIE *Terrestrial Animal Health Code* (the *Terrestrial Code*) and the *Aquatic Animal Health Code* (the *Aquatic Code*) stipulate that this is an official form of communication between the OIE and its Member Countries (5, 6). Chapters 1.1 of both *Codes* define notification procedures. In Article 9 of the Organic Statutes, the OIE is required to transmit to its Member Countries – either automatically or upon demand – any information collected by the OIE. In urgent situations this information must be provided immediately. Failure to disclose facts on the incidence of diseases by the OIE – for whatever reasons – would constitute a violation of its Organic Statutes.

The list of notifiable diseases is regularly revised by experts and updates are approved at the annual General Session of the World Assembly of Delegates after formal adoption by governments (Art. 5 of the Organic Statutes). The current list of notifiable diseases includes 116 terrestrial and aquatic animal diseases. Members are also obliged to inform the OIE about the measures used for disease control. The reporting of notifiable diseases is particularly important in relation to international frontiers, as it enables countries to implement border control measures to prevent the entry of diseases via imports from other countries. Members are required under the Organic Statutes to provide, on demand, as much information as possible to the OIE (Art. 5).

However, the OIE *Terrestrial* and *Aquatic Codes* include provision for immediate notifications of emerging diseases according to the definitions of those *Codes*.

The withholding of information on a disease situation from the OIE by an OIE Member would also amount – regardless of the grounds – to a violation of the OIE Organic Statutes.

Membership of the OIE makes the provision of information to the Organisation an international legally binding obligation.

Without a prior amendment to the Organic Statutes by all Member Countries, any decision of the World Assembly must comply with the above principles.

It is evident, therefore, that the disease notification systems of both organisations – WHO and OIE – are based on legally binding instruments.

Information from the OIE Reference Laboratories and other credible sources

A World Assembly Resolution of 2004 determined that OIE Reference Laboratories must immediately communicate positive findings of a reportable disease to the OIE and to the veterinary authority of the Member Country concerned. If the biological sample is provided by a country other than that in which the Reference Laboratory is located, the Delegate of the country from which the sample came must provide confirmation and inform the OIE of the precise origin of the sample before the results can be published (4). This requirement for confirmation is important, as it prevents a premature or erroneous report from a laboratory, which could have serious economic repercussions. If the source of the information cannot be validated, further investigations by the national veterinary authorities concerned are indicated. The fear that a Delegate could prevent the clarification of a disease situation in his/her country by refusing or delaying information is not justified. A Delegate who does not share information about the possible occurrence of a disease (which is inconsistent with the OIE Delegate's obligations under Article 5 of the Organic Statutes) has no grounds for objection if the OIE informs other Members in accordance with Articles 4 and 9 of the Organic Statutes.

While WAHIS relies on official information provided by the OIE Delegate, the OIE Director General may also report unofficial (but reliable) information of global health concern. Such action has been taken on several occasions.

However, the reporting of positive results from OIE Reference Laboratories is a delicate matter because of the relationship between the laboratory and its clients, which is sometimes based upon private law. The laboratory cannot share details about the sender with third parties (such as the OIE or national Veterinary Services) without the permission of the client, except if they are obliged to do so by national law, which is more and more common in many Member Countries.

Using data from notification systems to raise public awareness

Incidents of international concern for public health can have a major political and economic impact on the whole of society, especially in a world more oriented to a culture of fear and general sentiment than logic. In contrast, animal disease events (excluding those of a zoonotic nature that may have a significant impact on public health) do not generally raise such concerns at the international level. However, the occurrence of a serious non-zoonotic animal disease (e.g. foot and mouth disease) in a disease-free country can seriously affect the economy of that country and has a very negative effect on the local population. These effects are not limited to farmers, but can also affect the general public: there can be restrictions on human movements; disease management measures can shock the general public; and the impact on tourism can be serious. Despite this, animal diseases that are not zoonoses normally do not have the same impact on international public opinion as an outbreak of a highly contagious and potentially fatal human disease.

Data from notification systems can help raise public awareness of the impact of non-zoonotic diseases. However, political leaders and the media must be convinced to use these data responsibly to raise awareness without creating panic. Unfortunately, this is not always possible.

Capacity-building efforts

Given that the notification systems of the WHO and the OIE both have the necessary instruments and legally binding obligations for a fast and efficient global distribution of information on human and animal diseases, the priority is to focus common efforts on the strengthening of governmental Public Health and Veterinary Services. This is particularly important in the more than 120 Member Countries that are developing countries or countries in transition. The best systems are only as strong as their weakest components and the timely notification of a disease is dependent on the ability of countries to detect diseases at an early stage. There are many remote areas in the world that are 'hotspots' for disease outbreaks, where Public Health and Veterinary Services are weak or inexistent. In those parts of the world WHO is concentrating its work on capacity building and the OIE is helping its Members – via the application of the OIE Performance of Veterinary Services (PVS) Tool and PVS Gap Analysis – to improve their veterinary surveillance and notification systems. Strengthening Veterinary and Public Health Services, increasing their ability to detect diseases rapidly, and improving their capacity to respond quickly are the keys to the successful implementation of the 'One Health' concept.

The nomination and regular training of national focal points for disease information on terrestrial and aquatic animals (both domestic and wild) constitute an efficient way to improve global knowledge of the disease situation.



La base réglementaire de la notification des maladies animales et humaines au niveau mondial

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Résumé

La réussite de la lutte contre les maladies, notamment celles à dimension potentiellement épidémique dépend de la possibilité d'accéder rapidement à une information exhaustive sur la situation sanitaire à l'égard de ces maladies. Afin de pouvoir mettre en œuvre une réponse rapide, les maladies doivent faire l'objet d'une notification immédiate et transparente. La diffusion rapide d'informations sur les maladies animales, zoonoses incluses, était l'objectif premier de la création de l'Organisation mondiale de la santé animale (OIE) en 1924. En ce qui concerne les maladies humaines, les membres de l'Organisation mondiale de la santé (OMS) ont adopté en 2005 le Règlement sanitaire international, ensemble de règles portant sur la notification rapide des maladies infectieuses. Les auteurs décrivent ces deux systèmes de notification qui permettent, d'une part, au public

d'accéder aux informations, et d'autre part aux responsables politiques de mieux gérer les risques associés aux maladies concernées.

Mots-clés

Maladie animale – Maladie humaine – Norme internationale – Notification – Zoonose.



Base jurídica mundial de la notificación de enfermedades animales y humanas

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Resumen

La eficacia de la lucha contra toda enfermedad o posible epidemia exige un rápido acceso a información completa sobre la situación sanitaria. Además, para poder intervenir a tiempo es indispensable que las enfermedades sean notificadas de inmediato y con toda transparencia. Cuando en 1924 se creó la Organización Mundial de Sanidad Animal (OIE), su principal objetivo se cifraba en el rápido intercambio de información sobre enfermedades animales, en particular las zoonosis. Por lo que respecta a las enfermedades del ser humano, en 2005 los miembros de la Organización Mundial de la Salud (OMS) aprobaron un conjunto de nuevas reglas acerca de la rápida notificación de enfermedades infecciosas: el Reglamento Sanitario Internacional. Los autores exponen estos dos sistemas de notificación, gracias a los cuales el gran público tiene acceso a la información y las instancias decisorias pueden gestionar mejor los riesgos ligados a determinadas enfermedades.

Palabras clave

Enfermedad animal – Enfermedad humana – Norma internacional – Notificación – Zoonosis.



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