International Journal of Infection Control
ISSN 1996-9783
Vol. 2 Issue 1

Letter to the Editor

Global Implications of the New WHO International Health Regulations (IHR)

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Int J Infect Control 2006, 2:1 Available from: http://www.ijic.info

Immediate cause for the revision

Following the cholera and plague epidemics in the 19th century, the International Sanitary Conventions were established for the control of international outbreaks. First in 1951 and then modified in 1969, the International Health Regulations (IHR) were put down in writing. This ordinance outlined that individual countries shall report all cases of cholera, plague, smallpox and yellow fever to the World Health Organization (WHO) in order to enable appropriate control measures, e.g., through international travel restrictions[a]. The increase in international travel and economic traffic and the recent experiences with diseases such as SARS and avian influenza required revision of the IHR. Not only was there a need to extend the scope of the treaty to a broad range of emerging diseases, it appeared to be advisable to strengthen the role of WHO.

Revision process

The WHO drafted a revised document and distributed it to all 192 WHO-Member States for approval. Subsequently, the proposal was discussed and harmonized within each country. In many countries, this process involved many sectors outside of health, for instance, Ministries of Economic, Foreign and Internal Affairs, Agriculture, Defence and Justice, and also organizations such as National Centres for Disease Control, harbours and airports. On a higher level, the European Community had an additional task consisting of not only obtaining a uniform vision within the community, but also in addressing cross border issues between its 25 member states. In addition, positions were assessed and negotiated for each of the six WHO regions (EURO, AFRO, EMRO, AMRO, WPRO and SEARO). As all preparations demanded a truly multisectoral approach, the process was very demanding for the delegations; a subtle balance had to be sought between national and international interests and between economic and public health concerns. In addition possible interference with other treaties had to be precluded, e.g., conventions on atomic energy, armed forces and maritime traffic.

New IHR

The new IHR seeks to balance maximum infectious diseases protection and a minimum disruption of international trade and traffic. The treaty comprises 66 articles and nine annexes in which agreement is reached on some important points including:

- The scope of the current IHR is widened from a few diseases to a more general risk assessment approach. It includes biological, chemical, as well as nuclear threats: the so-called public health emergencies of international concern;
- The IHR request the establishment of a national focal point. This focal point should be the responsible authority in the Member State for bilateral contacts with WHO;
- The IHR calls for minimum core capacities (e.g., lab facilities, surveillance systems, etc.) to enable countries to comply with the requirements for early reporting and control measures;
- Countries need to identify points of entry (harbours, airports) that must be able to deal with in and outgoing travel and trade. In addition, it allows for the identification of ground crossings (border over land) that may be subject to additional restrictive measures;
- Several statements are made to protect human rights or privacy of people affected by measures. Invasive medical examinations (e.g., blood sampling) at the border are, for instance, only allowed after informed consent by the traveller;
- The IHR provide a transparent procedure for the Director General of WHO to issue recommendations to prevent further spread disease and protect public health.

a. Smallpox was excluded in 1981 due to global eradication

A working group of technical experts developed an algorithm (flowchart) to facilitate the decision making process on whether or not to report outbreaks and cases of infectious diseases to WHO. This was a lengthy negotiation process with greatly varying opinions as to whether or not to include a list of specific diseases. The United States requested, in line with their current war against terrorism, the inclusion of smallpox, plague, anthrax, botulism and tularaemia on a separate list of notifiable diseases. However, the EU argued in favour of an algorithm without a list of diseases, for fear of countries focusing solely on existing pathogens on the list, while emerging diseases with unknown cause (e.g., SARS in 2003) would not be notified. Eventually, a compromise was reached where a short list of diseases was incorporated within the algorithm and the decision maker is guided along these pathogens (Figure 1). Public health events of international concern and of unknown cause were further included and should therefore also be reported to WHO.

The new IHR was passed by the World Health Assembly on 23 May 2005 and will come into force on 25 June 2007.[1] During the last World Health Assembly in May 2006, an additional resolution was adopted[2] calling for the advanced implementation of several articles as a result of the increasing risks for an influenza pandemic. One of the main items in the resolution is the urge for all Member states to identify their Focal Point as soon as possible.

Implications for member states

The most important obligation that lies with the Member States is to ensure a basic infrastructure that enables early detection, validation and reporting of public health emergencies of international concern. In addition, countries must have an infrastructure that enables them to comply with measures that are issued by WHO. Annex 1 of the IHR should be used by Member States to assess their capacities. The Annex does not only refer to basic surveillance and response, but sets standards as well for designated airports, ports and ground crossings. The level of requirements is relatively basic to ensure that even low income countries are able to comply.

A nice way to assess the current capacities is using past events and use them as an example to see if the current IHR requirements could be met. Table 1 summarizes some examples of past events which shall be notified to WHO within 24 hours after detection according to the new IHR.

Based on Dutch experiences so far, it turns out to be important that for notifiable diseases clear case definitions are defined. The reporting of probable cases of any disease that can be confirmed or ruled out within a couple of hours does not seem desirable, as any IHR report is likely to create a lot of media attention. In addition, it seems difficult to balance the importance to identify points of entry to the quite substantial requirements for these (sometimes small) locations.

Table 1: Past examples (some more recent than others), which would have been notifiable to WHO, according to the new IHR

	Year	Reporting country	Event	Reason for notification to WHO
Cholera	1854	UK	616 persons died in Soho, London [3]	Serious public health impact; listed as disease to be assessed
West Nile virus	1999	USA	62 confirmed cases in New York of which 7 fatal [4]	Serious public health impact; listen as disease to be assessed
Avian influenza A/H7N7	2003	Netherlands	89 human cases (incl. secondarytransmission); 5,000 cullers possibly exposed [5]	Notifiable disease + public health and economic impact
SARS	2003	China, multiple countries	8,437 probable cases, of which 813 died [6]	Notifiable disease + public health and economic impact
Chikungunya	2006	Multiple countries (Indian Ocean)	3,115 cases, of which in week 9: 196 cases and an estimated 13,000 infections [7]	Serious public health impact

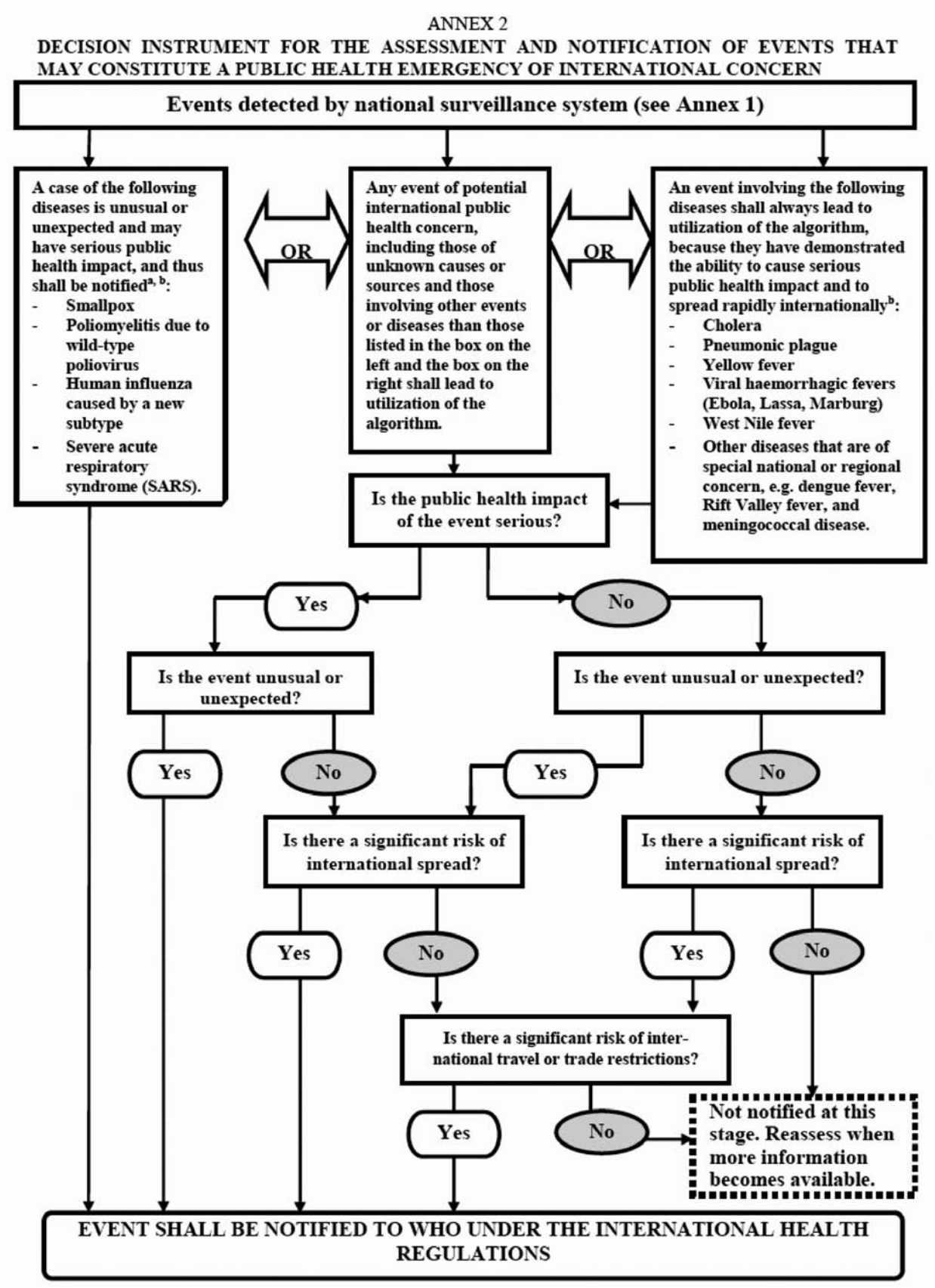

Figure 1: Annex 2 Algorithm to facilitate the decision making process on whether or not to report cases of infectious diseases to WHO

Given that the new IHR also requires the notification of chemical and nuclear threats, the Ministries of Health, together with all concerned ministries and organizations, have to assess which authority will become the official national focal point. Besides that, each Member State will have to assess whether it complies with the minimum core capacities in the new IHR. These minimum requirements contain not only surveillance and response capacities, but also hygiene measurements and other demands at those places that are identified as a point of entry. A particular responsibility lies with countries that are (partially) responsible for overseas areas, like France, UK, Portugal and The Netherlands.

The IHR do not affect the rights and obligations derived from other international agreements. This means for instance, that the European Schengen Treaty which prevents the enforcement of measures at EU "ground crossings" (borders over land) remains valid.

Shame & blame

Although the new IHR are based on the so-called "shame & blame" principle, in which there is no legal consequence if a country refrains from reporting to WHO, the new treaty is a major improvement compared to the previous IHR. The fact that 192 Member States agreed on the revised document is a clear statement to their acknowledgement of WHO's global authority in the control of public health emergencies of international concern. The algorithm facilitates the decision on which specific events and cases of infectious diseases need to be reported to WHO within 24 hours. The WHO may then respond by dispatching field teams of the Global Outbreak Alert and Response Network (GOARN) or by sending experts from organizations like the European Centre for Disease Prevention and Control (ECDC) or CDC Atlanta. These reports serve the ultimate goal for WHO to respond both timely and adequately to worldwide emergencies. However, the IHR still need a lot of practical translation in order to make it implementable in different settings. To ensure that each Member State doesn't end up with its own interpretation, exchange of experiences among Member States should be encouraged by WHO.

Acknowledgements

We would like to thank Maryse Kok, Ministry of Health, for commenting on the document.

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