Global health security - epidemic alert and response

Revision of the International Health Regulations

1. There is a continuous evolution in the public health risk posed by infectious diseases related to their causative agents, to their easier transmission in changing physical and social environments, and to their development of resistance to existing antimicrobial agents. In 1995, the World Health Assembly adopted resolution WHA48.7 on the revision and updating of the International Health Regulations. The Health Assembly was fully aware that the strengthening of epidemiological and laboratory surveillance and of disease control activities at national level (i.e. where the diseases occur) is the main defence against the international spread of communicable diseases.

2. The main challenges encountered during the revision include: ensuring that only public health risks (caused by an infectious agent) that are of urgent international importance are reported under the Regulations; avoiding stigmatization and unnecessary negative impact on international travel and trade of invalid reporting from sources other than countries, which can have serious economic consequences for Member States making sure that the system is sensitive enough to pick up new or re-emerging public health risks. This approach goes beyond notification based solely on specific diseases, though a list of diseases may be provided as a supplementary guide.

3. The development and field-testing of syndromic reporting to replace disease-specific reporting was the first step in the revision process. Five syndromes were initially identified to cover the diseases of potential urgent public health importance, and included diseases that occur naturally as well as those that might be caused intentionally. A pilot study in 22 countries in all WHO regions (completed in 1999) field-tested the approach. As a result of an interim review, it was concluded however that syndromic reporting, although valuable within a national system, was not appropriate for use in the context of a regulatory framework, mainly because of difficulties in reporting syndromes in the field test, and because syndromes could not be linked to preset rules for control of spread. It was also recommended that, because trade was often adversely affected when certain public health risks occur, links with WTO should be investigated. Several meetings to begin this process have already been conducted between WHO and the WTO Committee on Sanitary and Phytosanitary Measures.

4. Since 1996 the Secretariat has sought to strengthen WHO’s global alert and response capacity by setting up a mechanism actively to collect information on reported public health risks, to verify it confidentially with Member States, and then to ensure that appropriate containment measures are taken. This mechanism is WHO’s global alert and response network.¹

¹ See document EB107/5, paragraph 15.
5. A great deal of information on public health risks, originating from formal laboratory and epidemiology networks and from electronic discussion groups and diverse media, has been collected through WHO’s global alert and response network. Since 1997 when the mechanism became fully operational in WHO, 745 reports have been investigated in direct collaboration with the countries concerned, and the network is being continually extended to reduce currently existing gaps in coverage, mainly in developing countries where epidemiological and laboratory capacity is being reinforced. In addition to information on public health risks (whether arising naturally or through intentional acts), this network could also provide information on noncommunicable diseases and environmental, chemical or nuclear risks. WHO is currently investigating the feasibility of this further application. Work is also being done on developing a decision tree which, once field-tested, could be useful to countries in determining whether a public health risk is of urgent international importance and, if so, in helping decide which public health measures should be applied.

6. Hence, proposals now being made within the framework of the revision of the International Health Regulations include the use of WHO’s global alert and response network as an additional source of information on public health risks of urgent international importance together with reports from countries, and of the decision tree. It is proposed, however, to make only confidential use of the information derived from the network until it has been verified and analysed by WHO working with the countries concerned and with WHO collaborating centres. Such collaboration is essential in a world where information is widely available. For example, in two recent instances, unverified public health information published on electronic sites resulted in severe financial losses for the countries concerned. Collaboration between WHO and these countries after the reports appeared resulted in the misleading information being corrected.

7. Based on experience gained from the operation of WHO’s global outbreak alert and response network, it is therefore proposed that the revision of the International Health Regulations should cover: (1) maintenance of a reliable system to prevent the extension of public health risks through the application of updated and broader routine public health measures for transport of persons and goods; and (2) reporting of potential public health risks (by both countries and the WHO network), evaluating the information in collaboration with the Member State concerned to establish whether it is of urgent international importance and, if this is the case, ensuring that appropriate international public health measures are recommended by WHO.

8. The following main next steps are envisaged:

1) seeking support from the Executive Board and the World Health Assembly for continuing work on the revision of the International Health Regulations, including discussions with the WTO Committee on Sanitary and Phytosanitary Measures, the development of a decision tree for determining whether a public health risk is of urgent international importance and field-testing this decision tree in countries (2001);

2) preparation of a draft revised text of the International Health Regulations (by end 2002);

3) holding meetings of regional working groups to evaluate the applicability of the new text to Member States (by end 2003); and

4) submission of the revised text to the World Health Assembly (no later than May 2004).