

New rules on international public health security



WHO

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Dr Guénaél Rodier earned his MD and public health qualification at the University of Paris in his native France. He started his career as a private general practitioner in Djibouti in 1983, then joined the London School of Hygiene and Tropical Medicine in 1989 before working as an epidemiologist at the US Naval Medical Research Unit No. 3, in Egypt for four years. From 2000 to 2005, Rodier was director of WHO's communicable disease surveillance and response unit. In 2006, he was special adviser for communicable diseases to the regional director of WHO's Regional Office for Europe. He was appointed director of International Health Regulations coordination at WHO in Geneva in 2007.

A new set of rules on how WHO's 193 Member States will handle disease outbreaks and other emergencies that could have international public health implications enter into force this month. The International Health Regulations (IHR) were revised in 2005 and have since been published in all six official United Nations' languages. Now the onus is on countries to implement the regulations. But in order to do this, they need to build their own capacity to detect, assess, notify and report "events", which may be a disease outbreak, a chemical spill or an unusually high number of deaths in a community. Countries also need to build capacity to respond to public health risks and emergencies of international concern within their borders, such as containing an outbreak. In this interview, Dr Guénaél Rodier, director of International Health Regulations Coordination, describes the challenges that Member States face as they prepare to take on their new responsibilities.

Q: Are Member States adequately informed about the purpose of the International Health Regulations (2005) and their role?

A: It was Member States who proposed and revised the regulations. But, of course, we understand that when you participate in a revision process it is not the same as implementing the regulations. That's why we are developing information materials and are setting up meetings and training sessions with the Regional Offices for countries' "National IHR Focal Points" that are responsible for liaising with WHO on the IHR, as well as for WHO country offices and other staff who would be on the front line should an event with international public health implications occur. We are developing an IHR e-training session for senior officials from countries. They need to know what the new procedures are starting 15 June 2007, so we are preparing guidelines and an interactive

training module. We are exploring the possibility of providing comprehensive education through a Masters degree in international health security in collaboration with several European universities. This degree would be open to anyone who is interested in this area of study, including staff from ministries of health. It is important to note that as a regulatory text the IHR requires consistent implementation across countries; however, there is room for regional variations in the way capacity is strengthened.

Q: WHO is charged with monitoring Member States' compliance with the new legally binding regulations, but how will it enforce them? There are plenty of disincentives for countries, such as fear of damaging trade and tourism, but are there incentives to comply?

A: It's a very common question: "Where are the police?" When you have a traffic

regulation, you comply because there is a police officer to monitor whether you comply and you get fined if you don't. There are no police or fines here. There are, however, strong incentives for countries to comply. In today's information society, you cannot ignore or hide a problem for very long. You can perhaps ignore or hide an event for a day or two, but after a week it's virtually impossible. WHO and its partners have a powerful system of gathering intelligence that will pick anything up immediately. Today, events are often initially reported, not by a Member State, but by non-official sources such as the media, NGOs (nongovernmental organizations), our network of collaborating centres, laboratory networks and partners in the field. I don't know of a single country that is keen to report a problem and, you are right, their first reaction is to say "let's wait and try to control it, we won't notify immediately", but in a matter of days WHO will know anyway, then, according to the IHR, WHO will request the country to verify the event and acknowledge receipt of this request within 24 hours. One of the incentives for countries to report such events is that these will already have been reported via the electronic highway. We will be in a much better position to help if we have been involved early on by the affected country. The fear of being named and shamed by the media and other countries concerned by the situation is in itself an incentive.

Q: There are past examples of some countries downplaying the significance of disease outbreaks, such as China with SARS (severe acute respiratory syndrome). This could happen again with another country and another health threat. What will happen if a Member State fails to comply with the IHR?

A: The price for non-compliance will be a damaged image and potential economic losses, which could have been avoided. A country that knows something and does not report it may make a short-term economic gain, but will incur long-term losses when it

gains a reputation as being unreliable as a country and as a business partner.

Q: How will governments know which disease outbreaks or other incidents with international public health implications to report to WHO?

A: This is covered in Annex II of the IHR. In the old days you had a list of diseases to report, you had it or you didn't have it, it was "yes" or "no". Now we are asking countries to assess the situation and exercise judgment. The IHR (2005) are telling countries that we don't want to know about every case of cholera, but only those events which may constitute a public health emergency of international concern. However, we do want to know about every case of four diseases: SARS, smallpox, wild-type polio and new strains of human influenza. Disease outbreaks should be reported if there are public health implications. For example, sporadic cases of cholera are not unusual in sub-Saharan Africa, but in a Scandinavian country, where you do not expect to find cholera, an outbreak would merit a notification. Disease outbreaks must always be investigated, analysed and assessed as public health risks. The IHR (2005) include an algorithm to help countries decide whether to notify WHO. If you don't have to notify initially, you may re-assess the event after more information is available. Even with the algorithm, exercising judgment can be difficult, that's why countries can consult WHO if they are not sure.

Q: What is WHO doing to help governments improve their disease surveillance and outbreak response? Wealthy countries will benefit from sound disease surveillance and outbreak response in developing countries, so are the wealthy contributing to building capacity in less affluent countries?

A: Countries are required to build capacity for disease surveillance and outbreak response under the regulations. Member States asked for this and have committed themselves to doing it, so I hope they can find resources as this is in the interest of each individual country, and, yes, will benefit all. An initial investment is needed, then, once it is up and running, the system needs to be maintained. Funding is critical. Technology transfer will play a role. Much of this work is likely to be funded on a bi-

lateral basis and many countries in need are already in touch with institutional development partners. Development partners are interested, but the challenge is to find out how much it will cost and for how long. Countries have two years to make an assessment of their existing capacities; they must also develop national plans of action and to make a cost estimate. Then they have three years to implement the national plan, with two possible extensions of two years on the basis of justified needs.

Q: But even if developing countries receive donor funds for the initial investment, how can they afford to run expensive new disease surveillance and outbreak response systems? How can they justify spending substantial resources on an emergency, when the burden of disease for chronic conditions, such as tuberculosis and malaria, is so much greater?

A: You are right, they can't use the money for treating tuberculosis or malaria to pay for IHR implementation, so they will have to be innovative and find other budget lines, outside the health sector, such as those for security. In the IHR, public health overlaps with national security. Unless a government creates a special body to address both public health and national security, it is not easy to get these two sectors working together. These sectors represent different cultures, different magnitudes of money and different approaches. Security budgets are based on risk management. Governments buy tanks, weapons, etc., and continue to receive budget lines even if they don't use them. If public health did not use hospitals and other facilities, its budget would be cut. At present, we are asking the public health sector to cover the cost of preparing for something that may never happen, so it might make more sense to allocate security budgets for this.

Q: How will it be possible to implement the IHR in decentralized states, such as Germany, India, Nigeria and the United States of America (USA)? What happens when the national government is unable to ensure coordination with local and regional authorities when reporting health threats?

A: A meeting in Ottawa, Canada, last year brought together a number of federal countries where specific techni-

cal issues related to federalism were discussed. States had until 15 December 2006 to make reservations to one or more of the regulations' provisions. Only one country, the USA, made a reservation about implementation, saying it would implement the IHR (2005) in line with the principles of federalism.

Q: The IHR used to cover three diseases: yellow fever, plague and cholera. Now they cover the outbreak of many diseases as well as chemical and nuclear accidents, laboratory accidents and bioterrorism attacks. Many countries cannot count the number of people who die, let alone record the causes. How can they be expected to carry out effective surveillance and monitoring of all of these public health events?

A: A public health emergency is not just a public health problem – it's a community problem. So these events do get reported, if not by the public sector, by the media and the community, when witnesses see people dying or taking ill in unusual ways. Whatever occurs, it is picked up by the media, is digitalized and then picked up by the country and by others, including WHO and its partners through epidemic intelligence activities. In more than 90% of cases, when something is reported by the media, it may be mislabelled, but it is a real event worthy of an investigation. The challenge for countries is to develop a mechanism to respond to a rumour, for instance, that many people have died. They need to have epidemic intelligence teams that are ready to investigate rapidly at anytime something reported by the media, the community, an NGO or whoever.

Q: But if you send experts to the scene based on inaccurate media reports you waste precious resources? You need reliable information.

A: We do send in experts based on reliable information and an investigation team is only fielded at the request of the country and following a thorough assessment that there is a need for a response. There is a verification process, so countries are required to provide WHO with sound technical information. One of the key elements is risk assessment. We know that you do not assess an event in one day. You get initial information, then more information. So usually it takes five or six days for a

proper assessment of an event and its probable importance. That's why WHO has set up the Global Outbreak Alert and Response Network (GOARN) mechanism. If a country requests assistance, WHO can send staff with the right technical skills, and also the right language and culture, to join the ministry of health authorities and help them investigate.

Q: Why was SARS the trigger for revising the IHR?

A: The real trigger was earlier: a plague outbreak in India in 1994 and an Ebola outbreak in Zaire in 1995. After these, the World Health Assembly said we needed to revise these obsolete regulations. WHO had been revising the regulations for a few years when SARS struck. SARS made the whole world realize how urgent it really was to

revise the regulations and this sense of urgency was further boosted by H5N1 [avian influenza]. In 2006, a year after the adoption of IHR (2005), countries recognized the importance of the new rules and agreed to implement the IHR (2005) immediately on a voluntary basis for events related to avian and pandemic influenza, in advance of 15 June 2007 when the regulations enter into force. ■

Recent news from WHO

- WHO published **World Health Statistics 2007** on 18 May. The report is the most complete set of health statistics from WHO's 193 Member States. This latest edition also profiles trends in 10 of the most closely-watched global health statistics and is the authoritative annual reference for set of 50 health indicators in countries worldwide. World health statistics 2007 is the official record of data produced by WHO's technical programmes and regional offices. In publishing these statistics, WHO provides the global evidence base for improvements and continued challenges in global public health. Find the report at: <http://www.who.int/healthinfo/statistics/en/>
- WHO launched a new web site on 4 May that will make it easier to search for information on clinical trials. The **Clinical Trial Search Portal** is a collaborative, international initiative led by WHO that facilitates the identification of all clinical trials, regardless of whether or not they have been published. For health-care researchers, funders, policy-makers and consumers the portal represents an enormous step towards greater access, transparency and accountability of health research globally. The portal is accessible at: <http://www.who.int/trialsearch>
- WHO and UNICEF on 3 May called on countries that procure their own **vaccines** to make sure these are purchased with vaccine vial monitors (VVM). VVMs are indicators that are printed or affixed on vials and ampoules and that become darker when exposed to heat, indicating that the vaccine may no longer be effective.
- WHO welcomed on 3 May the new **Health, Nutrition and Population Strategy** launched by the World Bank as "a major step forward in supporting poor countries to strengthen their health systems, improve the health services available to people and reduce poverty".
- WHO launched nine **patient safety** solutions on 2 May to help reduce the toll of health care-related harm that affects millions of patients worldwide. The solutions were prepared by WHO's World Alliance for Patient Safety and the WHO Collaborating Centre. Read the solutions at: <http://www.jointcommissioninternational.org/24839/>
- WHO released a report on **Youth and Road Safety**, which shows that road crashes are the biggest killer of young people between the ages of 10 and 24. Read the report at: <http://www.who.int/roadsafety/week/activities/global/youth/declaration/en/index.html>
- WHO and key partners met, on 19 and 20 April, to show commitment to combating **neglected tropical diseases**.
- About 700 000 more people in low- and middle-income countries received **treatment for HIV/AIDS** in 2006, according to a report released on 17 April. The number of people receiving antiretroviral treatment grew to 2 million in December 2006, which means that 28% of people in need of treatment received it, according to the report produced by WHO, UNAIDS and UNICEF. The report also focuses on other priority health sector interventions such as prevention of mother-to-child transmission of HIV (PMTCT). In 2005, only about 220 000 of the more than 2 million pregnant women estimated to be living with HIV received antiretroviral prophylaxis for PMTCT, representing an estimated coverage rate of 11%. The report entitled, *Towards universal access: scaling up priority HIV/AIDS interventions in the health sector*, can be found at: http://www.who.int/hiv/mediacentre/universal_access_progress_report_en.pdf
- TDR, the Special Programme for Research and Training in Tropical Diseases, announced a new, web database developed by an international network to help identify and prioritize **drug targets** against diseases that predominantly affect developing countries. More information is available at: www.who.int/tdr
- WHO launched a major online project, on 16 April, to revise the global standard for medical and health statistics: the **International Classification of Diseases (ICD)**. For the first time, WHO is inviting stakeholders to participate in the ICD revision through an Internet platform. This update is vital to keep up with recent progress in medicine and the use of information technology in the field of health, and to improve the basis for international comparisons. The last version of ICD was adopted in 1990 by WHO Member States, which use it as a standard to report diseases and deaths.

News from the World Health Assembly

More than 2400 people from WHO's 193 Member States, nongovernmental organizations (NGOs) and other observers attended the **World Health Assembly**, the supreme decision-making body of the World Health Organization (WHO), which took place in Geneva from 14 to 23 May. A number of key decisions were made.

- The Assembly approved a budget for 2008–2009 of US\$ 4.2 billion, an increase of nearly US\$ 1 billion from the US\$ 3.3 billion approved for 2006–2007.
- The Assembly passed a resolution on pandemic influenza preparedness calling on WHO to establish an international stockpile of vaccines for H5N1 or other influenza viruses of pandemic potential, and to formulate guidelines to ensure equitable distribution of pandemic-influenza vaccines at affordable prices in the event of a pandemic.
- A resolution on public health, innovation and intellectual property calls for a global strategy and plan of action in this area.
- A resolution to intensify access to affordable, safe and effective combination treatments for **malaria**.
- A resolution urged Member States to develop and implement long-term plans for **tuberculosis** prevention and control.
- Indigenous **polio** survives in parts of only four countries. Member States resolved to step up their efforts to eradicate the virus.
- A resolution was passed on **integrating gender** analysis and actions into WHO's work.
- The Assembly adopted a resolution expressing concern over the continuous deterioration of the health and economic conditions of the populations in the **occupied Palestinian territory**.
- A resolution on **better medicines for children** called on Director-General Dr Margaret Chan to undertake a programme of work to improve access to essential medicines for children. This year, WHO will develop a Model List of Essential Medicines for Children.
- In a resolution on **health technologies**, in particular medical devices, the Assembly urged Member States to draw up national guidelines and plans for the assessment, procurement and management of technologies used in health care.
- A resolution on **rational use of medicines** promotes an integrated, health systems approach to promoting more appropriate use of medicines, specifically, national multidisciplinary bodies to monitor medicines use and promote rational use.
- The Assembly agreed that a comprehensive review of all research undertaken on the **variola virus**, which causes smallpox, be undertaken beginning in 2010.
- A resolution urges WHO to provide advice and technical support for oral health programmes at country, regional and global levels, in collaboration with other United Nations organizations, WHO collaborating centres and NGOs.
- The WHA passed a resolution urging Member States and the Secretariat to increase investment in, and strengthen efforts towards **health promotion** as the cornerstone of primary health care and a core function of public health.
- A resolution on **emergency trauma care systems** draws the attention of governments to the need to strengthen pre-hospital and emergency trauma care systems (including mass casualty management efforts) and describes steps governments could take.
- Member States approved a resolution on strengthening **health information systems** and enhancing WHO's work on health statistics in general.
- Member States passed a resolution on a coherent **research strategy** for WHO, which will help to disseminate the outcomes of research and its utilization in decision- and policy-making for more effective health policies.
- Member States approved a resolution on the control of **leishmaniasis**.
- The Assembly endorsed the **Global Plan of Action on Workers' Health**, which aims to devise policy instruments on workers' health.
- A progress report to the Assembly describes **noncommunicable disease** activities in advocacy, surveillance and population-based prevention since the year 2000.
- The Assembly held lengthy discussions on public-health problems caused by the harmful use of **alcohol**. Delegates agreed that the issue will be discussed again at the WHO Executive Board in January, 2008.

For more about these and other WHO news items please see: <http://www.who.int/mediacentre/events/2007/en/index.html>