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Public-health preparedness requires more than surveillance

Almost 10 years ago, the World Health Assembly directed WHO to prepare a revision of the regulations governing the control of infectious disease. This request was an acknowledgment of the public-health threats posed by globalisation, and a recognition that the unrelenting traffic of international trade was providing new routes for diseases to spread.

Last week, the long-awaited revision of the International Health Regulations (IHR) entered the final stage of negotiations. On Nov 1, representatives from the 192 WHO member states gathered at the Palais de Nations in Geneva for a 2-week meeting to resolve the remaining points of contention before delivering the final treaty to the World Health Assembly in May, 2005. David Byrne, outgoing EU Health Commissioner, will shepherd the regulations through the final stages of negotiation, acting as a liaison between WHO and its member states to smooth the path of the treaty to the World Health Assembly, where the new IHR will become part of international law.

The revisions are widely viewed as essential. As the only legally binding set of regulations governing the control of infectious diseases, the IHR were established to ensure maximum security against the international spread of diseases, with the contingency that protective measures should cause minimum interference to trade. This balance is a delicate one. But the current regulations are hopelessly inadequate to achieve this aim. Restricted only to three named diseases—cholera, yellow fever, and plague—and lacking a framework for risk-appropriate protection measures, the current IHR are virtually useless against the disease risks most likely to cripple our global community, and provide scant legal support for countries to protect their borders against disease threats not covered by the regulations.

To address these fundamental problems, many of the core concepts of the revised IHR are completely new. The agreement focuses on strengthening global surveillance, improving communication between WHO and member states, and ensuring that each country has the laboratory capacity to rapidly identify outbreaks. By contrast with the current version, the new IHR include no predefined lists of diseases; instead, states are required to notify WHO of "all

events potentially constituting a public health emergency", regardless of cause. Each member state will be required to maintain a national IHR focal point to mediate communication between WHO and the government. The regulations also dictate minimum requirements for surveillance and response, and specific measures to prevent disease spread at airports, ports, and other points of entry.

As an incentive to governments to disclose all potential health emergencies, the new IHR allow states to make initial disease reports in private, thereby ensuring that false alarms do not unnecessarily damage trade. Such secrecy is impossible under the current rules, which dictate that all outbreak reports must be published in WHO's *Weekly Epidemiological Record*.

In revising the IHR, WHO acknowledges that surveillance is the cornerstone of efficient disease control and the key to mounting an effective response. But although promises of technical support and extra resources for less-developed countries are written into the new IHR, the response requirements of the treaty do not cover capacity for bringing public-health emergencies under control.

Coordination of global surveillance efforts will undoubtedly be a vital tool for identifying the point at which limited human-to-human transmission changes to efficient disease spread: the hallmark of a pandemic. But will this information be sufficient to ensure effective control of future public-health emergencies?

The possibility of an influenza pandemic represents one of the most serious threats to global health. An influenza outbreak is one of the few events to which all populations would be equally susceptible. Measures such as quarantine and border controls, which successfully halted the spread of severe acute respiratory syndrome and which some WHO member states would like given more prominence in the revised IHR, would have little effect on a disease in which the period of infectivity precedes the onset of symptoms. Vaccines, therefore, are the single most important intervention for controlling an influenza pandemic.

Although vaccine manufacturers, supported by the WHO Global Influenza Surveillance Network, have extensive experience matching new vaccines to

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seasonal strains, the low uptake of annual vaccinations means there is little incentive for companies to invest in facilities with spare capacity. As a result, the sudden demands of an influenza pandemic will rapidly exceed production capabilities. Current global manufacturing capacity can only produce enough vaccine for 5% of the world's population. And with more than 90% of facilities in developed countries, in the event of a crisis, states without the capabilities to produce vaccine themselves are likely to lose out altogether.

The revised IHR are right to strengthen global surveillance and alert procedures, but by coordinating these efforts the treaty has inadvertently highlighted the gap that still exists in many countries' capacities for dealing with the reality of a public-health

emergency. Even with technical assistance directed at increasing surveillance capacity, many poor countries cannot meet minimum standards for public-health preparedness.

In addition to surveillance, strong national public-health capacities are essential, particularly if countries are to maintain their sovereignty in public-health emergency situations. It is therefore imperative that incentives for vaccine production capacity are promoted alongside the revised IHR and not sidelined in separate influenza preparedness programmes.

The new IHR are important and necessary, but without simultaneous strengthening of public-health responses in every country of the world, we will remain unprotected against some of the biggest and most immediate threats. ■ [The Lancet](#)

Warning: geography may be hazardous to your health

Are you healthy and want to avoid getting sick? Better move to the USA. Need medical care but cannot pay for it? The UK is the place for you. Need to see a doctor today? You're out of luck unless you live in Australia or New Zealand.

These findings, released on Oct 28 on the website of the journal *Health Affairs*, are some of the most striking from the 2004 Commonwealth Fund International Health Policy Survey, the seventh in a series. This year's survey, done by telephone interviews with representative random samples of 8672 adults aged 18 years and older, focused on patients' experience of primary care and health systems performance in five countries: Australia, Canada, New Zealand, UK, and USA. To put its discouraging conclusion in the best possible light, there is plenty of room for improvement.

Primary care is acknowledged to be a critical part of any health system. For most people, it serves as the point of entry, and is the most likely arena for disease prevention, patients' education, and coordination of care. Yet how well any of these missions are fulfilled seems to depend heavily on where you live.

There were some unfortunately common themes across the five countries. For example, only a few respondents in each country were "very confident" of receiving safe, high-quality medical care when they needed it. Respondents in all countries reported

problems with access to care outside normal working hours, a situation that sometimes forced them into inappropriate use of emergency rooms, where long waiting times were common and quality of care was thought to be a concern. A happier common finding was patients' positive view of their doctors in general, and their listening and explanatory skills in particular. But these views were counterbalanced by the belief that their doctors don't spend enough time with patients and do not often engage them in their treatment plans.

Preventive care, including rates of mammography and cervical screening, as well as counselling on weight and physical activity and questions about mental health, fell short in all countries. The USA, with the highest shared costs and spending on health care, ranked highest in preventive care. For the poor, however, this promising statistic is likely to be of little consequence.

The countries surveyed here should use these findings to strengthen practices that are working, dismantle those that are not, and, in the case of the USA, to restructure a system in which so many people have limited or no access to care. After all, if this is the best primary care can do in these five developed, highly industrialised countries, what hope is there for less developed countries? ■ [The Lancet](#)

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