

**Report of the
Ebola Interim Assessment Panel**

The Panel is acutely aware that the Ebola crisis began and continues in local communities. These communities have been indelibly marked by fear and sorrow and by great sacrifice. The toll on their own health workers has been extraordinarily high, and local people are also integral to ensuring safe and dignified burials, staffing treatment centres, and performing contact tracing. Many international workers, including WHO staff at all three levels of the Organization, have likewise put themselves at great risk for the good of the global community. The Panel acknowledges with deep gratitude their work and generosity of spirit, and that of the huge number of people working in their own countries to bring this crisis to an end.

Executive Summary

The Panel believes that this is a defining moment for the health of the global community. WHO must re-establish its pre-eminence as the guardian of global public health; this will require significant changes throughout WHO with the understanding that this includes both the Secretariat and the Member States. At each of its three levels, the Secretariat must undergo significant transformation in order to better perform its core function of protecting global health. For their part, Member States must provide, at their highest political levels, the required political and financial support to their Organization. While WHO has already accepted the need for transformation of its organizational culture and delivery, it will need to be held accountable to ensure that this transformation is achieved.

The Ebola crisis not only exposed organizational failings in the functioning of WHO, but it also demonstrated shortcomings in the International Health Regulations (2005). If the world is to successfully manage the health threats, especially infectious diseases that can affect us all, then the Regulations need to be strengthened. We ask that the full Review Committee under the International Health Regulations (2005) to examine the role of the Regulations in the Ebola outbreak (the IHR Review Committee for Ebola), which follows our Panel, consider and take forward the implementation of our recommendations. Had the recommendations for revision made in 2011 by the Review Committee in relation to Pandemic (H1N1) 2009 been implemented,¹ the global community would have been in a far better position to face the Ebola crisis. The world simply cannot afford another period of inaction until the next health crisis.

Our report and recommendations fall under the following three headings: the International Health Regulations (2005); WHO's health emergency response capacity; and WHO's role and cooperation with the wider health and humanitarian systems.

The International Health Regulations (2005)

Health is considered the sovereign responsibility of countries, however, the means to fulfil this responsibility are increasingly global. The International Health Regulations (2005) constitute the essential vehicle for this action. The International Health Regulations were revised a decade ago in order to better protect global health security – specifically, with the aim to prevent, protect against, control and respond to the international spread of disease while avoiding unnecessary interference with international traffic and trade. The Ebola crisis has again highlighted the shortcomings of this instrument and its application by States and the WHO Secretariat as it now stands: (i) Member States have largely failed to implement the core capacities, particularly under surveillance and data collection, which are required under the International Health Regulations (2005); (ii) in violation of the Regulations, nearly a quarter of WHO's Member States instituted travel bans and other additional measures not called for by WHO, which significantly interfered with international travel, causing negative political, economic and social consequences for the affected countries; and (iii) significant and unjustifiable delays occurred in the declaration of a Public Health Emergency of International Concern (PHEIC) by WHO.

The Panel considers this situation, in which the global community does not take seriously its obligations under the International Health Regulations (2005) – a legally binding document – to be untenable.

¹ Document A64/10, Annex.

The Panel recommends as follows.

1. **WHO** should propose a prioritized and costed plan, based on independently assessed information, to develop core capacities required under the International Health Regulations (2005) for all countries. The financing of this plan is to be done in close partnership with the World Bank.
2. All levels of **WHO** should be strengthened in order to increase the Organization's ability to independently identify health risks and to declare health emergencies.
3. The **IHR Review Committee** for Ebola should consider incentives for encouraging countries to notify public health risks to WHO. These might include innovative financing mechanisms such as insurance triggered to mitigate adverse economic effects.
4. The **IHR Review Committee** for Ebola should consider disincentives to discourage countries from taking measures that interfere with traffic and trade beyond those recommended by WHO.
5. The **IHR Review Committee** for Ebola should consider the possibility of an intermediate level that would alert and engage the wider international community at an earlier stage of a health crisis. At present it is possible only to declare a full Public Health Emergency of International Concern (PHEIC).
6. The **United Nations Secretary-General's High-Level Panel on the Global Response to Health Crises** should put global health issues at the centre of the global security agenda. In particular, it should identify procedures to take specific health matters to the United Nations Security Council and consider incentives and disincentives needed to improve global health security.

WHO's health emergency response capacity

Having reviewed all the options, the Panel has concluded that WHO should be the lead health emergency response agency. This requires that a number of organizational and financial issues be addressed urgently.

The Panel considers that WHO does not currently possess the capacity or organizational culture to deliver a full emergency public health response. Funding for emergency response and for technical support to the International Health Regulations (2005) is lacking. Currently, less than 25% of WHO's Programme budget comes from assessed contributions (and the remainder from voluntary funds). There are no core funds for emergency response. The longstanding policy of zero nominal growth policy for assessed contributions has dangerously eroded the purchasing power of WHO's resources, further diminishing the Organization's emergency capacity. Although a significant number of Member States were in favour of increasing assessed contributions, the Sixty-eighth World Health Assembly decided to maintain the zero nominal growth policy. The Organization's capacity for emergency preparedness and response must be strengthened and properly resourced at headquarters, regional and country levels.

When a health emergency occurs, WHO must have the ability to shift into rapid decision-making and action, and to adapt and adjust its resource allocation, methods of work and information practices accordingly. Developing appropriate human resources policies and lines of reporting should be a key part of preparedness. The Panel welcomes the Director-General's plan for an expanded and stronger global health emergency workforce. The Panel strongly supports the establishment of a contingency fund to enable a rapid response. By expediting implementation of these changes, WHO can re-establish confidence in its ability to reform.

In the Ebola crisis, WHO played a critical role with its research and development work, despite the erosion of core funding and continuing inadequate funding for research and development for neglected diseases. It is essential that affected communities and populations have access to new medical products as soon as they become available.

The Panel recommends as follows.

7. *At the 2016 Executive Board and World Health Assembly meetings, **Member States** should reconsider moving from the policy of zero nominal growth to increase assessed contributions by 5%.*
8. *In order to ensure delivery of effective preparedness and response capacity, **Member States and partners** should contribute immediately to the contingency fund in support of outbreak response, with a target capitalization of US\$ 100 million fully funded by voluntary contributions.*
9. ***WHO** should be made fit for health emergency response. This needs to be fully supported by the political will and resources of the **Member States**.*
10. ***WHO** must develop an organizational culture that accepts its role in emergency preparedness and response.*
11. ***WHO** should establish the WHO Centre for Emergency Preparedness and Response, which will be based on the currently separate outbreak control and humanitarian areas of work. This WHO Centre will need to develop new organizational structures and procedures to achieve full preparedness and response capacity.*
12. ***WHO**, through the Director-General, should immediately establish an independent Board to oversee this Centre. It should guide the development of the new Centre and report on its progress to the Executive Board, Health Assembly and the United Nations' Inter-Agency Standing Committee. The Chair of this Board should provide an annual report on global health security to the Executive Board, Health Assembly and the United Nations General Assembly.*
13. ***WHO** must adopt a new approach to staffing in country offices; the country circumstances must be taken more fully into account and the highest level of capacity must be ensured for the most vulnerable countries. At country level, the WHO Representative must have an independent voice and be assured of the full support of the Regional Director and the Director-General, if challenged by governments.*
14. ***WHO** must re-establish itself as the authoritative body communicating on health emergencies. It must fulfil its role in rapidly, fully and accurately informing governments and publics across the world about the extent and severity of an outbreak.*
15. ***WHO**, together with its partners, must ensure that appropriate community engagement is a core function when managing a health emergency.*
16. ***WHO** should play a central convening role in research and development efforts in future emergencies, including the acceleration of the development of appropriate diagnostics, vaccines, therapeutics and medical and information technology.*
17. ***WHO** should maintain high alert levels in the current crisis. Until fundamental outbreak control measures such as community engagement and coordination are in place, the current crisis is not over.*

WHO's role and cooperation with the wider health and humanitarian systems

The Panel considers that during the Ebola crisis, the engagement of the wider humanitarian system came very late in the response. The Panel was surprised that many donors, governments, the United Nations and international nongovernmental organizations understood only either the health emergency or the humanitarian system. In part this was due to lack of understanding across the two systems, caused by different approaches to risk assessment. In addition, the emergency grading levels do not coordinate well across the WHO's Emergency Response Framework, the United Nations humanitarian system and the International Health Regulations (2005). The Panel expects the proposed WHO Centre to contribute significantly to closing this gap.

The Panel is clear that by September 2014 it was essential that highly visible action be taken to generate political and financial support from the global community. While the United Nations Mission for Emergency Ebola Response (UNMEER) catalysed this high-level political and financial support, it was less successful in coordinating the effort in affected countries. Its establishment might not have been necessary had the broader humanitarian system been engaged through the United Nations' Inter Agency Standing Committee system at an earlier point in the crisis. For example, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and other United Nations agencies should have been engaged more strongly and earlier in the crisis.

The Panel recommends as follows.

18. **WHO** should consider how to coordinate its own emergency grades and declarations of a Public Health Emergency of International Concern (PHEIC) with the emergency levels applied in the broader humanitarian system, in order to facilitate better interagency cooperation.

19. **WHO** should ensure that its staff and stand-by partners have a better understanding of the humanitarian system.

20. **The United Nations Secretary-General's High-Level Panel on the Global Response to Health Crises** should emphasize the need for the United Nations system to understand the special nature of health risks, the International Health Regulations (2005) and the implications of declaring a Public Health Emergency of International Concern (PHEIC). United Nations Office for the Coordination of Humanitarian Affairs (OCHA) should take the lead in ensuring this for the wider humanitarian community.

21. **The United Nations Secretary-General** should consider – when a crisis escalates to a point where it poses a high-level global health threat requiring greater political and financial engagement – the appointment of a Special Representative of the Secretary-General or a United Nations Special Envoy with a political/strategic role to provide greater political and financial engagement. The Panel would not recommend the establishment of a full United Nations mission.

Conclusion

The Panel firmly believes that this is a defining moment not only for WHO and the global health emergency response but also for the governance of the entire global health system. The challenges raised in this report are critical to the delivery of the proposed Sustainable Development Goals, especially Goal 3: Ensure healthy lives and promote well-being for all ages.

The Panel recognizes that it has made recommendations to many different actors and that these recommendations are interdependent in their implementation. Significant political commitment at both global and national levels is needed to take them forward.

BACKGROUND

1. During its special session on the Ebola emergency in January 2015, the Executive Board adopted resolution EBSS3.R1, in which, inter alia, it requested an interim assessment, by a panel of outside independent experts, on all aspects of WHO's response to the Ebola outbreak. In response to the resolution, the Director-General established a panel to undertake this work in early March 2015. The Panel reviewed many reports and met with key people within and outside WHO, including senior WHO staff, representatives of the United Nations Mission for Ebola Emergency Response (UNMEER), international nongovernmental organizations and Member States. The Panel also visited the three severely affected countries and the Regional Office for Africa.

2. The Ebola virus disease outbreak, which began in 2013 in West Africa, is the largest and most complex Ebola outbreak on record. Widespread and intense transmission has devastated families and communities, compromised essential civic and health services, weakened economies and isolated affected populations. The outbreak also put enormous strain on national and international response capacities, including WHO's outbreak and emergency response structures. The Panel remains extremely concerned about the grave health, social and economic costs of the Ebola outbreak. In light of the unpredictable nature of outbreaks and other health crises, and the mounting scale of ecological changes that may trigger them, improving WHO's leadership and response to events such as these is critical. Systems and measures in place need to be able to deal with extreme complexity, especially in relation to outbreaks in fragile States with weak institutions.

3. The Panel was also clear that its assessment was to be a learning exercise for everyone concerned in the Ebola crisis. The Panel's overriding concern was to understand what happened and to advise on the resources, systems, people, and changes in the organizational structure and culture needed to improve the future performance of WHO.

4. The Panel adhered closely to its mandate and terms of reference,¹ beginning with an assessment of the roles and responsibilities of WHO at the three levels of the Organization, and bearing in mind that the Organization comprises not only the Secretariat, but also the Member States. Member States are responsible for their own actions and statements, especially with respect to their obligations under the International Health Regulations (2005). They have key decision-making roles in relation to WHO's priorities and resources and the Secretariat's mandate. Many of these responsibilities go beyond the remit of health ministers; other government ministries and heads of government also bear responsibilities, especially in times of crisis. The Panel has already given input into the United Nations Secretary-General's High-level Panel on the Global Response to Health Crises in its examination of these broader issues.

5. The Panel is cognizant of the many other public health and humanitarian crises that were competing for the attention of WHO and the broader United Nations system during this period. For WHO, these included outbreaks of Middle East respiratory syndrome, poliomyelitis, and avian influenza H5N1 and H7N9 virus infections. For WHO and the broader United Nations and humanitarian system, Level 3 humanitarian emergencies during 2014 included the crises in the Central African Republic, Iraq, South Sudan and Syrian Arab Republic. The Panel recognizes that once the full extent of the risk was understood and resources were mobilized, it was possible to better control the Ebola outbreak, and that, although the outbreak is still ongoing, with two countries continuing to report cases, the worst-case scenarios concerning projected numbers of cases did not come to pass.

6. The Panel is aware that its findings are presented at a critical juncture not only for WHO, but also for the global community as a whole. In September 2015, it is expected that the Sustainable Development Goals will be adopted at the United Nations General Assembly; and ways to finance a more equitable approach to development will be considered by the Third International Conference on Financing for Development

¹ See Annex.

(Addis Ababa, 13–16 July 2015). The Panel stresses that its recommendations should be considered in these important meetings and the high relevance of global health security fully understood. The fact that the leaders of the G7 group of countries have recognized the global health challenges at hand and that a high-level United Nations panel is further exploring the role of the whole United Nations system in providing global health security, further supports a new understanding, namely: that protecting people’s health across borders – as stipulated in the International Health Regulations (2005) – is integral to all development efforts.

7. Below the Panel sets out its findings and recommendations along three main lines of inquiry: the International Health Regulations (2005); WHO’s health emergency response capacity; and WHO’s engagement with the wider health and humanitarian systems.

INTERNATIONAL HEALTH REGULATIONS (2005)

8. The International Health Regulations (2005) are the international framework for strengthening global health security, and are binding on all WHO Member States. They aim to prevent, protect against, control and respond to the international spread of disease, while avoiding unnecessary interference with international traffic and trade. They embody a commitment to the ethos of public health and shall be implemented “with full respect for the dignity, human rights and fundamental freedoms of persons.” They also define the rights and obligations of countries to report certain public health events to WHO, and establish a number of procedures that WHO must follow to uphold global public health security. Under the Regulations, the Director-General can, upon the advice of an Emergency Committee, declare a public health emergency of international concern (PHEIC). The declaration of a PHEIC can lead to disagreements with national governments, and the Panel notes that independent and courageous decision-making by the Director-General and the WHO Secretariat is necessary with respect to such a declaration. This was absent in the early months of the Ebola crisis.

9. Whereas health is considered the sovereign responsibility of countries, the means to fulfil this responsibility are increasingly global, and require international collective action and effective and efficient governance of the global health system. The International Health Regulations (2005) constitute an essential vehicle for this action. The legal responsibilities contained in the Regulations extend beyond ministries of health, and must be recognized as obligations at the highest levels of Member States’ governments.

10. This Panel suggests that in the interest of protecting global health, countries must have a notion of “shared sovereignty”. Through the International Health Regulations (2005), Member States recognized that there are limits to national sovereignty when health crises reach across borders. In the Ebola crisis, there were failings on the part of the Secretariat and of Member States in upholding the Regulations. Unfortunately, a great opportunity to strengthen the Regulations was lost when the 2011 recommendations of the Review Committee on the Functioning of the International Health Regulations (2005) in relation to Pandemic (H1N1) 2009 were not fully implemented.¹ The Ebola outbreak might have looked very different had the same political will and resources been applied in order to support implementation of the International Health Regulations (2005) over the past five years.

Country preparedness

11. The Ebola outbreak has shown that countries must be better prepared for global health threats. The International Health Regulations (2005) provide the accepted framework to improve country capacity to detect, assess, notify and respond to public health threats. Although Member States are obligated to develop certain core public health capacities under the Regulations, many have failed to do so. As at November 2014, 64 States Parties informed the Secretariat that they had achieved these core capacities, 81 requested extensions and 48 did not communicate their status or intentions. These results are not acceptable; it is

¹ Document A64/10, Annex.

irresponsible for countries with the resources to build these capacities not to have done so. Those countries without these resources that have not fulfilled their obligations need support from the Secretariat and other Member States in order to do so.

12. Measuring progress on core capacities is key to implementation of the International Health Regulations (2005). Reliable information about country situations is crucial for planning required financial resources. The Panel considers it unacceptable that only voluntary self-assessment is required for measurement of core capacities. When the health of all is at stake, information must be validated through some form of peer review or other external assessment. The Panel is encouraged by efforts, both within WHO and through initiatives such as the Global Health Security Agenda, to promote evaluation frameworks, external monitoring and transparency about core capacities. Regional political agencies, such as the African Union, the Association of Southeast Asian Nations, the Commonwealth of Independent States, the European Union, and others, can support this work.

13. The Panel recommends that WHO, in partnership with the World Bank, propose a prioritized and costed plan, based on reliable information on country systems, to develop the core capacities under the International Health Regulations (2005) for all countries. This plan should be submitted to donor agencies, Member States and other stakeholders for funding. It could include new types of financing mechanisms. Such financial support should be considered at the Third International Conference on Financing for Development in July 2015. The Panel supports the strengthening of Regulations' core capacities as an important part of the post-2015 development agenda and the financing of global public goods.

14. In-country surveillance activities need to be integrated with components of national health systems, not only for emergencies, but also for a broader array of diseases and conditions. In the Ebola crisis integrated standards for data collection were needed in all the countries affected. The Panel found that data were not aggregated, analysed or shared in a timely manner and in some cases not at all. The Panel also noted that better information was needed to understand best practices in clinical management. Innovations in data collection should be introduced, including geospatial mapping, mHealth communications, and platforms for self-monitoring and reporting. The Panel recommends stronger collaboration between private and public sector actors to take this forward. Further, in an emergency, private companies must play their part in ensuring that their technological platforms are freely available for public health purposes.

15. The Panel noted that there are ongoing discussions between the African Union and United States Centers for Disease Control and Prevention to establish an African Centre for Disease Control. The Panel strongly suggests that WHO should take the overall coordination role in such initiatives. It is important that the proposed African Centre prioritize support for capacity building in countries for surveillance and disease control. It should connect with other relevant African networks, such as the regional Emerging Dangerous Pathogens Lab Network, and should take into consideration the establishment of subregional structures. Duplication and parallel systems must be avoided.

Disincentives for country transparency

16. At present there are clear disincentives for countries to report outbreaks quickly and transparently, as they are often penalized by other countries as a result. This was a significant problem in the Ebola crisis. Article 43 of the International Health Regulations (2005) requires all countries to behave with appropriate responsibility towards the international community in the adoption of travel and trade restrictions. However, during the Ebola outbreak, more than 40 countries implemented additional measures that significantly interfered with international traffic, outside the scope of the temporary recommendations issued by the Director-General on the advice of the Emergency Committee. As a result, the countries affected faced not only severe political, economic and social consequences but also barriers to receiving necessary personnel and supplies. These consequences constituted a significant disincentive to transparency. In this context, the private sector, especially those involved in international transport, must also act responsibly.

17. Such behaviour poses a serious threat to any meaningful implementation of the International Health Regulations (2005). Nearly a quarter of WHO Member States instituted travel and trade restrictions that were not called for by WHO, in violation of the Regulations. Very few countries informed the Secretariat of these additional measures, and some of those requested to justify their measures failed to do so. The Secretariat must be strengthened to request justification of these measures under the Regulations. The Panel recommends that the IHR Review Committee for Ebola and the United Nations Secretary-General's High-Level Panel on the Global Response to Health Crises make this possible.

18. Within this political context, incentives are needed to encourage notification of health threats. The Panel notes the work of the World Bank, WHO, development partners and the private sector with respect to a new financing mechanism for health emergencies. The feasibility of an insurance scheme needs to be explored, along with other innovative approaches. In such a model, WHO should play a central role in the risk assessments that would trigger such payments so that the economic impacts of health crises could be mitigated.

19. The Member States have a responsibility to act as global citizens. Accordingly, the Panel requests that the full IHR Review Committee for Ebola¹ examine options for sanctions for inappropriate and unjustified actions under the Regulations; precedents exist in international practices such as those of WTO (e.g. for trade matters under non-tariff headings). Where Member State behaviour threatens the response to the crisis by, for example, making it impossible for health workers to reach affected countries, there should be a procedure to take this matter to the United Nations Security Council. This should be a matter of priority for the IHR Review Committee for Ebola and the United Nations Secretary-General's High-Level Panel on the Global Response to Health Crises. If these issues are not addressed, the Secretariat will continue to have little ability to enforce Member States' obligations under the International Health Regulations (2005).

Declaring a Public Health Emergency of International Concern (PHEIC)

20. In the Ebola crisis, a PHEIC under the International Health Regulations (2005) was not declared by the Director-General until 8 August 2014. A range of factors affecting the delay are set out in the Box below.

21. WHO does not have a culture of rapid decision-making and tends to adopt a reactive, rather than a proactive, approach to emergencies. In the early stages of the Ebola crisis, messages were sent by experienced staff at headquarters and the Regional Office for Africa, including after deployments in the field, about the seriousness of the crisis. Either these did not reach senior leaders or senior leaders did not recognize their significance. WHO does not have an organizational culture that supports open and critical dialogue between senior leaders and staff or that permits risk-taking or critical approaches to decision-making. There seems to have been a hope that the crisis could be managed by good diplomacy rather than by scaling up emergency action.

22. Although WHO has a considerable number of policies and procedures in place, these were activated late because of the judgements relating to the declaration of a PHEIC. It is clear that early warnings about the outbreak, including from Médecins Sans Frontières, did not result in an effective and adequate response. Although WHO drew attention to the "unprecedented outbreak" at a press conference in April 2014, this was not followed by international mobilization and a consistent communication strategy. The countries most affected, other Member States, the Secretariat, and the wider global community were all "behind the curve" of the rapid spread of the Ebola virus. Many of the nongovernmental organizations that were on the ground in the affected countries, running development or humanitarian programmes, were faced with having to respond to a situation for which they were not well prepared; they lacked normative guidance and no adequate coordination mechanisms existed. These limitations put an undue burden on the organizations concerned.

¹ To be established pursuant to decision WHA68(10).

Box. Delay in declaring a Public Health Emergency of International Concern (PHEIC)

The delay was related to many factors, including the following: a late understanding of the context and nature of this Ebola outbreak, which was different from previous outbreaks; unreliable reporting on the spread of the virus; problems with information flow and decision-making within WHO; and difficult negotiations with countries.

- *Country situation.* Risk assessment was complicated by factors such as weak health systems, poor surveillance, little early awareness of population mobility, spread of the virus in urban areas, poor public messaging, lack of community engagement, hiding of cases, and continuing unsafe (e.g. burial) practices.
- *Country politics.* In some instances, there was initial denial of both cases and the extent of the outbreak on the part of national authorities; there was also an understandable concern about the economic consequences of transparency. In certain other countries, there were attempts to exploit the situation for political gain.
- *WHO politics/dilemmas.* Delay in the declaration of a PHEIC stemmed from: concerns about challenging governments; understandable worries about economic and trade implications for the countries affected; the fact that WHO had been previously criticized for declaring a PHEIC for pandemic influenza H1N1; and lack of data resulting from conflicting definitions of cases and the unwillingness of various actors to share data for aggregation.
- *WHO's organizational culture.* WHO has a technical, normative culture, not one that is accustomed to dealing with such large-scale, long-term and multi-country emergency responses occurring at the same time or that is well-suited to challenging its Member States.
- *International community.* It failed to take notice of warnings, partly because previous Ebola outbreaks were small and contained; there was no intermediate level of warning between outbreak and the declaration of a PHEIC; there was poor public understanding of risk; politicians and media were not always helpful in explaining risk or disease and its transmission, and in some cases were irresponsible in their messaging.

23. The Panel notes that the determination of a Public Health Emergency of International Concern (PHEIC) is a single binary decision: there is either a PHEIC or there is not. The Panel recommends that the IHR Review Committee for Ebola consider the possibility of an intermediate level that would alert and engage the wider international community at an earlier stage in a health crisis. This could facilitate preparedness, preventive action, and dedication of resources, which could avert an escalation of the situation. There is also a lack of understanding in the international community and in the media about the meaning of a declaration of a PHEIC, and this must be addressed.

24. The International Health Regulations (2005) provide for the establishment of an Emergency Committee to advise the Director-General of WHO in determining whether a particular event constitutes a PHEIC and to provide advice on any appropriate temporary recommendations. The Panel recommends that this structure be continued, but encourages triggering its establishment earlier in a crisis at a new intermediate stage of alert. The IHR Review Committee for Ebola should determine required timelines for rapid decision-making. Maintaining a regularly updated pre-cleared list of potential experts will help to avoid delays in calling the Emergency Committee.

The Panel recommends as follows.

1. **WHO** should propose a prioritized and costed plan, based on independently assessed information, to develop core capacities required under the International Health Regulations (2005) for all countries. The financing of this plan is to be done in close partnership with the World Bank.
2. All levels of **WHO** should be strengthened in order to increase the Organization's ability to independently identify health risks and to declare health emergencies.
3. The **IHR Review Committee** for Ebola should consider incentives for encouraging countries to notify public health risks to WHO. These might include innovative financing mechanisms such as insurance triggered to mitigate adverse economic effects.
4. The **IHR Review Committee** for Ebola should consider disincentives to discourage countries from taking measures that interfere with traffic and trade beyond those recommended by WHO.
5. The **IHR Review Committee** for Ebola should consider the possibility of an intermediate level that would alert and engage the wider international community at an earlier stage of a health crisis. At present it is possible only to declare a full Public Health Emergency of International Concern (PHEIC).
6. The **United Nations Secretary-General's High-Level Panel on the Global Response to Health Crises** should put global health issues at the centre of the global security agenda. In particular, it should identify procedures to take specific health matters to the United Nations Security Council and consider incentives and disincentives needed to improve global health security.

WHO'S HEALTH EMERGENCY RESPONSE CAPACITY

Rationale

25. The Ebola outbreak was large and complex and required a combined health and humanitarian response. Not all health emergencies will follow this pattern. The health and humanitarian communities will need to be attuned to the varied ways in which emergencies present themselves, and able to respond accordingly. Each new event poses specific problems and it is important there are appropriate mechanisms for learning from each of them.

26. At present, WHO does not have the capacity or organizational culture to deliver a full emergency public health response. A number of options, including the following, have been suggested by different organizations and individuals: (i) a new agency should be established for health emergencies; (ii) the emergency part of the health response should be led by another United Nations agency; or (iii) investments should be made so that the operational capacity of WHO for health emergency response is fully in place.

27. The Panel recommends that the third option be pursued with vigour. This was also expressed by Member States at the Special Session of the Executive Board on Ebola and at the Sixty-eighth World Health Assembly. Establishing a new agency takes time and requires substantial new resources in order to set up administrative systems and capacity.¹ A new agency would, in any case, have to rely on and coordinate with WHO for public health and technical resources, creating an unnecessary interface. Similarly, if another United Nations agency were expected to develop health emergency capacity, it would need to coordinate in depth with WHO, especially with respect to the International Health Regulations (2005).

28. All this suggests that, as WHO already has the mandate to deliver an operational response, it would be a far more effective and efficient use of resources to make WHO fit for purpose. However, the Panel is convinced that WHO must make fundamental changes, particularly in terms of leadership and decision-making processes, in order to deliver on this mandate. But it will also require the resources and political will of the Member States to make WHO the agency that can fulfil this mandate in the twenty-first century. This transformation must be carried out urgently.

29. WHO does not need to build up a comprehensive emergency capacity that would be separate from that of other United Nations agencies. WHO should have standing agreements with other agencies, for example with WFP, to provide practical logistical capacity for purchasing and transport. WHO's overarching goal would be one of coordination in health emergencies, in which, where possible, national governments should be fulfilling their responsibilities, or, when other partner agencies have capacities, WHO should not seek to duplicate or replace them. WHO and United Nations partner agencies should ensure they understand and respect the one another's roles and responsibilities, and hold regular joint training and simulation exercises.

¹ The evidence shows that establishing a new agency typically involves the following phases: initial high-level discussions between heads of governments; the establishment of a working group to develop a basic framework for the agency's structure and function; an official United Nations resolution calling for the establishment of a new agency; the recruitment of senior management; and mobilization of human and financial resources for the agency to become fully operational. Based on the experience of several reference agencies and entities (the Global Fund to Fight AIDS, Tuberculosis and Malaria, UNAIDS, the GAVI Alliance and UN Women), this process typically takes between one and two years, reflecting the time needed to reach consensus on fundamental issues such as the role, governance and budget of the new agency and the time needed for an organization to become operational.

Broadly, the costs incurred in establishing a new agency can be broken down into three categories: (i) the one-off costs associated with establishing a new agency; (ii) annual overhead expenses of the secretariat; and (iii) programme expenditure. Best estimates, based on recently established agencies, would put categories (i) and (ii) at a minimum of US\$ 100 million each. Further resources are needed for programmatic activities in line with the mandate of the agency.

30. WHO's main role in health emergencies is coordination. In addition, WHO experts should continue to use their technical competence to develop normative guidance for policy and practices to be used by all actors, including for health systems strengthening. Nevertheless, there will be times when WHO staff will have to act as frontline responders, particularly in epidemiologic surveillance, and for a variety of outbreaks and health emergencies. WHO's direct engagement is likely to be considerably increased in situations involving fragile States. The IHR Review Committee for Ebola and the United Nations Secretary-General's High-Level Panel on the Global Response to Health Crises must explore instances where a fragile State has neither the capacity nor the will to address an outbreak that poses risks to the rest of the world; in these cases, mandatory action may be warranted.

Governance and leadership

31. The Panel recommends the creation of a single, unified WHO Centre for Health Emergency Preparedness and Response, to be based on the currently separate outbreak and humanitarian areas of work. A simple merger will not suffice – it will need new organizational structures and procedures.

32. Member States and the Secretariat's senior leadership must be fully committed to and supportive of the establishment and the unique characteristics of this Centre. Continuity must be ensured, in view of the election of a new Director-General in 2017, at which time the Centre will be relatively new; the incoming Director-General will need to have a full understanding of how this Centre fits within the Organization and be committed to its fundamental role within WHO.

33. The Director-General should immediately establish an independent board to oversee this WHO Centre. The Board should guide the development of the new Centre and report on its progress to the Executive Board, the Health Assembly and the United Nations' Inter-Agency Standing Committee. The Chair of this Board should provide an annual report on global health security to the Executive Board and Health Assembly and the United Nations General Assembly.

34. The Head of this new Centre must be: a strong leader and a strategic thinker, with political, diplomatic, crisis coordination, organizational and managerial skills; and able to make sound decisions quickly, and to discern when to move from a situation of normal readiness and alert to rapid response in the field. A finely honed sense of how to coordinate with many other partners and actors is essential. In an emergency, the Centre Head would need full operational authority. The post of Centre Head should be advertised immediately.

Financing

35. At present less than 25% of WHO's biennial programme budget comes from assessed contributions; the remainder comes from voluntary funds that are largely restricted for purposes specified by donors. There are no core funds for emergency response (the outbreak and crisis response budget line of the programme budget) as such, although every year a considerable amount of money is made available as donor contributions for emergencies. WHO is put at a severe disadvantage by the fact that the core funds are so limited and do not allow an appropriate and rapid response. On a related note, the resources that underpin the Secretariat's capacity to monitor implementation of the International Health Regulations (2005), and to provide related technical support, have been reduced to a level that the Panel believes is now very inadequate.

36. More broadly, the zero-nominal growth policy for assessed contributions that has now been in place for many years has eroded the work of the Secretariat. At a time when spending by Member States on health has risen globally by about 25%, the weighted purchasing power of WHO's mainly United States dollar-based resources has lost a full third of its purchasing power since 2000. The Panel was extremely disappointed that many Member States, at the Sixty-eighth World Health Assembly, were reluctant to move from the policy of zero nominal growth to increase assessed contributions by 5%, as initially requested by the Director-General in her proposal for the Programme budget 2016–2017. The Panel requests that Member States reconsider this decision at the 138th session of the Executive Board and the Sixty-ninth World Health Assembly. The recommendations in this report can be delivered only if resources are forthcoming. We also recommend that

the United Nations Secretary-General's High-Level Panel on the Global Response to Health Crises re-examine the consequences of zero nominal growth.

37. The Panel also reviewed and provided initial guidance on the proposals developed for a contingency fund in support of outbreak response. The Panel notes that the Health Assembly in May 2015 discussed and decided on the creation of a specific, replenishable contingency fund to rapidly scale up WHO's initial response to outbreaks and emergencies with health consequences, with a target capitalization of US\$ 100 million fully funded by voluntary contributions.¹ The Panel welcomes the decision that the fund would be under the authority of the Director-General, with disbursement at her discretion. Such an arrangement should highlight prevention, rather than simply response, and therefore should be available at an early stage. Clear arrangements on decision triggers for the release of funds must be made. While the proposed contingency fund is largely directed to WHO, the Panel would find it helpful if the Director-General had some discretion for payments to countries for staffing issues, including hazard pay for health care workers and the cost of their insurance and evacuation. The Panel strongly requests that Member States contribute to this fund immediately.

Changing the organizational culture and procedures

38. When a health emergency occurs, there must be an ability to shift into rapid decision-making and action, and adapting and adjusting resource allocation, methods of work and information practices. Member States also have to be flexible, recognizing that some ongoing work of the Organization may be delayed or postponed in an emergency. In WHO's own response capacity in large-scale emergencies, the biggest skill gap continues to be found in the area of crisis coordination and leadership, and this needs to be addressed. Wherever possible, however, in-country coordination should be led by the governments of the countries affected themselves; this should include taking into account the assessment of needs made by the country.

39. The staff of the new WHO Centre will be critical to creating the right kind of organizational culture. Both regular staff of the Centre and the other staff across the Organization who will be stand-by members for emergency response need to be thoroughly trained, including through simulation exercises. Clear procedures need to be developed to ensure that every staff member, whether within the Centre or in reserve, knows exactly what he or she is to do in an emergency. New, simplified systems and processes in administration, human resources management, and procurement that would facilitate rapid action and deployment are required. As previously recommended,² the Organization should establish "an internal, trained, multidisciplinary staff group who will be automatically released from their normal duties". The plan for the new Centre should be costed and financed.

40. There is a need to use best practices for appropriate human resources in emergencies with respect to work hours, leave, staff deployments, and accountability.

Global health emergency workforce

41. The Panel welcomed the Director-General's plan for an expanded and stronger global health emergency workforce to respond to outbreaks and emergencies with health consequences.

42. Standby capacity needs to be put in place across WHO and its partners, including Global Outbreak Alert and Response Network (GOARN), and there should be pre-agreed arrangements for foreign medical teams. WHO has a critical role to play in developing and implementing workforce protocols and training materials, as well as managing workforce information. The workforce needs to be prequalified, fully trained, on standby, and

¹ See decision WHA68(10).

² See document A64/10.

thoroughly familiar with the roles its members are to play. Partners need to supply, in addition to epidemiologic surveillance and clinical management, expertise in coordination and leadership, as these were the biggest gaps in the response.

43. The Panel strongly supports the strengthening of the national workforce in all countries for work in country as well as for contributing to the standby capacity for outbreaks beyond national borders. The Panel particularly values the plan of the African Union to facilitate African health staff to support the response in the future. The African Union's role in providing political stewardship of this capacity building is important. Other regional organizations will also need to put in place measures to contribute to standby capacity, as is being discussed in the European Union. Equally though, these developments should be coordinated with the WHO global health emergency workforce to prevent duplication of effort.

44. The Centre also needs to establish policies and procedures, in advance of the next emergency, for the provision of medical care, medical evacuation, insurance, and hazard and death benefits for deployed personnel. These standards were not in place before the outbreak, and designing them during the crisis required a great deal of time, negotiation, and trial and error. This work should include clarifying the roles of the police and the military.

Regional response

45. The Regional Office for Africa has been criticized for its handling of the Ebola crisis. While some criticism may be justified, the core team for outbreaks and emergencies is very small – fewer than 10 people for the whole Region. The number of staff was reduced considerably between 2011 and 2013 as a result of budget cuts. The Panel expects WHO regional offices to play a major role in supporting countries in their preparedness and surveillance, and they will need to be properly resourced to fulfil this function. The outbreaks and emergency team structure should be the same in each Regional Office and its head will normally report to the Regional Director. However, in Grade 3 emergencies, in a Public Health Emergency of International Concern (PHEIC), and possibly in Grade 2 emergencies at the discretion of the Director-General, the reporting lines should switch. The regional emergency team and the head of the emergency operation in a country would report directly to the Head of the WHO Centre. The Regional Director will be critical in providing support at the highest political levels in the Region and should always be fully informed. The responsibilities and accountabilities need to be made clear and explicit to all concerned, and practiced and reinforced through simulation exercises, including at the highest level of WHO.

Country response

46. Countries must take responsibility for outbreaks that take place within their borders and cooperate with neighbouring countries to prevent further spread. Whenever possible, in-country coordination should be led by the governments of the countries affected themselves. Although the Ministry of Health should be central to the response, collaboration and coordination with other actors both within and outside government are critical; a large-scale emergency will require a response that goes beyond the Ministry of Health. In an emergency such as the Ebola crisis, it would be expected that a high-level committee chaired by the Head of Government be established. Day-to-day operations would be fully delegated to the national coordinator but with the full backing of the Head of Government to protect the work from political and other interferences. The United Nations Secretary-General's High-Level Panel on the Global Response to Health Crises should review the role of heads of government in public health emergencies.

47. When a health emergency occurs in a country which has a WHO country office, the WHO Representative must be able both to work closely with the Ministry of Health and to reach out to other ministries and departments. The WHO Representative must also be able to communicate accurate risk assessments that may not always be welcomed by governments. The WHO Representative must be assured of the full support of the Regional Director and the Director-General whenever the country is not willing to share information or agree on the actions proposed. Protocols must exist for staff to deal with such cases and training for WHO Representatives must include such situations.

48. Staffing in country offices needs to be reviewed so that the circumstances of the country are taken more fully into account. In countries prone to outbreaks of infectious diseases, the WHO Representatives and their teams might be expected to have more experience in handling emergencies and outbreaks. However, in a Grade 2 or 3 emergency, it may be appropriate that the WHO Representative does not lead it personally but steps aside to allow a head of emergency operations to take over. The WHO Representative's role then is to manage the key partnerships (government, donors, the United Nations and its agencies and nongovernmental organizations), to support the emergency team and continue to manage the other programmes in the country. Irrespective of how the emergency is managed the accountabilities for what and to whom need to be clear.

49. Delivering an effective emergency response in countries requires significantly strengthened administrative and managerial structures. There must be transparency, accountability, and monitoring, especially for financial resources. Mechanisms to provide immediate disbursements of funds at country level are required. The Panel heard of country offices' frustration at the lack of response from headquarters and regional levels and slow or no disbursements of emergency funds, despite a near absence of funds for any activities. There also needs to be more transparency about financial flows and use of donor funds.

50. The WHO Centre should be responsible for coordination across the three levels of the Organization. This will require excellent working relationships with regional and country offices before, during and after a crisis. Regional Directors and WHO Representatives need to understand and fully support "step aside" and "no regrets" policies, which may be implemented in emergencies.¹ Standby arrangements must be in place in countries. Joint evaluation after a health emergency must become part of the organizational culture at all levels of WHO.

Key findings from severely affected countries

51. WHO was reported to be respected for its technical work in the three countries visited and governments indicated they were well supported. Other key nongovernmental actors, however, complained that WHO was too close to governments in some cases, with the result that information was not available to the public and partners in a timely and effective manner.

52. WHO normally coordinates a number of key actors and works in coordination with the national government. In a health emergency, WHO not only coordinates the health cluster, but is also responsible for the coordination of specific technical activities such as surveillance. In the Ebola crisis, WHO should have had a key role to play in coordination, but it took a long time to get this started. Also, at different times in Guinea and Sierra Leone, the Ministry of Health was side-lined and played only a nominal role. This situation also means that an opportunity for learning that could be applied to future health emergencies by the Ministry of Health has been lost.

53. In Sierra Leone, when the United Kingdom military came in to coordinate the response, command and control was not initially given to civilian leadership. This was contrary to the situation in Liberia, where the United States military deployment was under civilian authority. There may be a place for military support for emergencies (for example, in construction and transport) but as agreed in civil/military guidelines, this must be under civilian control. In view of the increased potential for outbreaks in fragile States or war-torn areas, more attention needs to be paid to the role of the security sector – both domestic and foreign – in health emergencies.

¹ In a rapid deployment of experienced leadership teams in big crises, a "step aside" system ensures the best leadership is in place at both the strategic and operational level, which means that the most qualified person is leading the emergency work and may be brought in from outside the country e.g. from another country. A "no-regrets" policy means that at the onset of emergencies, WHO ensures that predictable levels of staff and funds are made available, even if it is later realized that less is required, with full support from the Organization and without blame or regret. This policy affirms that it is better to err on the side of over-resourcing the critical functions rather than risk failure by under-resourcing.

54. The Panel consistently heard that deployments were too short. Nothing creates more chaos in emergencies than constant, rapid turnover of personnel, some of whom do not have the requisite expertise. Knowledge transfer falters, and relationships break down. In the current phase of the response, such matters have improved dramatically, but there is still a huge lack of coherence in human resources management. Some deployed personnel still say they are not sure to whom they report or what they are meant to do. This shows a regrettable lack of respect and responsibility towards those engaged in response on the ground.

Community engagement

55. The Panel is surprised and dismayed by serious gaps in the early months of the outbreak in terms of engaging with the local communities; some of these gaps still exist in the late phase of the outbreak, which shows that messaging needs to be continuously refined so as to be responsive to the changing epidemiological situation. Traditional cultural practices, including funeral and burial customs, contributed to virus transmission, yet culturally sensitive messages and community engagement were not prioritized. Essentially, bleak public messaging emphasized that no treatment was available; this reduced communities' willingness to engage. Medical anthropologists and other social scientists should have been better utilized to develop appropriate messaging. Because many communities were in a post-conflict situation, they had high levels of distrust in authority. Owing in part to a lack of involvement on the part of the broader humanitarian systems, the resources of nongovernmental organizations, such as community development workers and volunteers, many from the countries and communities themselves, were not mobilized in the early stages. Given WHO's extensive experience with outbreaks, health promotion and social mobilization, it is surprising that it took until August or September 2014 to recognize that Ebola transmission would be brought under control only when surveillance, community mobilization and the delivery of appropriate health care to affected communities were all put in place simultaneously.

56. The difficulty of effectively engaging communities was a problem that could have been foreseen had a social and political analysis been conducted to complement the epidemiological assessments. For example, in Guinea, there is considerable mistrust in the authorities, following a long period of civil upheaval. During the Panel's visit there, it was clear that communities still have not been fully engaged, as demonstrated by the fact that cases who do not appear on contact lists continue to be found and cases remain reluctant to give contact information. In Liberia, there was more activity on the ground, even in the early days of the outbreak. For example, the United Nations Mission for Liberia (UNMIL) disseminated messages through local radio, in 17 different languages. In Sierra Leone, there is less certainty about early community engagement, but large numbers of nongovernmental organizations were activated later in the emergency. Police forces, national militaries, and other security actors were involved to different extents; in future, their roles need to be carefully defined for maximum effectiveness.

57. Engagement with local community leaders is essential. Women, who were often not mobilized effectively in this outbreak, are particularly important to this effort. The engagement of women and women's organizations is critical to changing behaviours and educating communities. As a medical anthropologist who was enlisted to work in the response, said, "Ebola is a fire; women are the water. And it is water that puts out the fire".

58. The Ebola crisis has confirmed the absolute necessity of community engagement in a public health emergency. The Panel heard this over and over in the countries affected. As one community leader in Liberia said: "at first, there was confusion – we didn't know what Ebola was, what to do. We didn't know where to start; there were dead bodies in all our houses; rumours about witchcraft. Then we organized ourselves, educated other community members about hand washing, touching, and how to handle the sick and the dead." In many cases, the communities had to adapt long-held traditional and cultural practices to the reality of this deadly disease.

59. Social science expertise is critical to understanding local beliefs, behaviours and customs. These experts can inform those who are at the front line, enabling them to better understand the context and work more effectively with communities to change behaviour. This must become part of standing protocols and standards for health emergencies.

Communications

60. WHO failed in establishing itself as the authoritative body on communicating about the Ebola crisis. Although an emergency media team was put in place to manage WHO's messaging and content, the communication strategy was not able to counteract the very critical reporting on the work of the Organization. This problem was reinforced by the delayed declaration of the Public Health Emergency of International Concern (PHEIC), misleading Twitter messages and leaked documents. The Panel is clear that WHO failed to engage proactively with high-level media and was unable to gain command over the narrative of the outbreak. This weakness had repercussions for many areas of the response; a better approach to communications could have improved confidence in WHO and reduced levels of fear and panic.

61. At national level, risk communication addressing the public is a major responsibility of governments in both affected and non-affected countries. Communication of risk and promotion of appropriate safe behaviours need to be much more thoroughly researched and documented, so that WHO and other entities engaged in this activity have a better impact in their risk communication efforts to the public. With respect to both of the communications issues described above, the Panel recommends that outside advice be sought to address these shortcomings.

Research and development

62. The erosion of core funding for WHO has been reflected in many areas, and the Ebola outbreak demonstrated that research and development for neglected diseases remains inadequate. A platform for the development of diagnostics, therapeutics, and vaccines must be put in place and developed to such an extent that, when there is an outbreak, much of the preparatory and early research work will have been completed and it will then be possible to move quickly to production and deployment. WHO will need to be involved in research and development work for future emergencies.

63. In the Ebola outbreak, WHO assisted in fast-tracking vaccine development and provided leadership in the conduct of trials for candidate vaccines and in the use of experimental therapies such as drugs and blood products. These were important contributions. However, in the early phase of the outbreak, discussions around these developments were largely ad hoc; WHO did not exercise its convening power in this area until August 2014.

64. The Panel also heard concerns about whether WHO's role in research and development for potential Ebola therapies and vaccines was a distraction from the response, particularly during vaccine trials. The Panel concluded, however, that WHO should be commended for this work, as it stepped up to fill a void at a critical stage of the outbreak. It is, of course, also necessary to undertake research while an outbreak is ongoing, when there are both patients and contacts who can potentially benefit from participation in well-designed clinical trials. It must be ensured that the policy for WHO's engagement with non-State actors does not make partnership with the private sector impossible in such circumstances.

65. In the future, there is a need for research and development to include the following.

(i) Strengthening point of care diagnostics: there is a need to scale up availability of rapid diagnostic capacity. There was a huge gap in this area in the early part of the outbreak, which probably contributed to the spread of the disease.

(ii) For infectious diseases for which vaccines and novel therapies have been developed, trials should progress from animal models to Phase I clinical trials. At that point, when an outbreak occurs, a rapid scale up to large-scale manufacturing is feasible. It is encouraging that a number of sites for clinical trials are being established in Africa.

(iii) Development of equipment for better patient care, from improved personal protective equipment to devices used in treatment centres.

- (iv) Use of innovative technology for the prevention and control of outbreaks. This could be in the form of devices such as smartphones to support global positioning system (GPS) monitoring of contact tracers, geographical information system (GIS) mapping of affected districts, and linking contacts and databases in command centres and field communications.

66. The Panel considers that during major outbreaks and Public Health Emergencies of International Concern, it is critical that affected communities and populations have access to new medical products as soon as they become available. In this regard, countries may consider any flexibilities in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) and those recognized by the Doha Ministerial Declaration on the TRIPS Agreement and Public Health that would permit improved access in light of the circumstances in their countries.

The Panel recommends as follows.

7. *At the 2016 Executive Board and World Health Assembly meetings, **Member States** should reconsider moving from the policy of zero nominal growth to increase assessed contributions by 5%.*
8. *In order to ensure delivery of effective preparedness and response capacity, **Member States and partners** should contribute immediately to the contingency fund in support of outbreak response, with a target capitalization of US\$ 100 million fully funded by voluntary contributions.*
9. ***WHO** should be made fit for health emergency response. This needs to be fully supported by the political will and resources of the **Member States**.*
10. ***WHO** must develop an organizational culture that accepts its role in emergency preparedness and response.*
11. ***WHO** should establish the WHO Centre for Emergency Preparedness and Response, which will be based on the currently separate outbreak control and humanitarian areas of work. This WHO Centre will need to develop new organizational structures and procedures to achieve full preparedness and response capacity.*
12. ***WHO**, through the Director-General, should immediately establish an independent Board to oversee this Centre. It should guide the development of the new Centre and report on its progress to the Executive Board, Health Assembly and the United Nations' Inter-Agency Standing Committee. The Chair of this Board should provide an annual report on global health security to the Executive Board, Health Assembly and the United Nations General Assembly.*
13. ***WHO** must adopt a new approach to staffing in country offices; the country circumstances must be taken more fully into account and the highest level of capacity must be ensured for the most vulnerable countries. At country level, the WHO Representative must have an independent voice and be assured of the full support of the Regional Director and the Director-General if challenged by governments.*
14. ***WHO** must re-establish itself as the authoritative body communicating on health emergencies. It must fulfil its role in rapidly, fully and accurately informing governments and publics across the world about the extent and severity of an outbreak.*
15. ***WHO**, together with its partners, must ensure that appropriate community engagement is a core function when managing a health emergency.*
16. ***WHO** should play a central convening role in research and development efforts in future emergencies, including the acceleration of the development of appropriate diagnostics, vaccines, therapeutics and medical and information technology.*
17. ***WHO** should maintain high alert levels in the current crisis. Until fundamental outbreak control measures such as community engagement and coordination are in place, the current crisis is not over.*

WHO'S ENGAGEMENT WITH THE WIDER HEALTH AND HUMANITARIAN SYSTEMS

67. It is well understood that WHO leads the United Nations' Inter-Agency Standing Committee's Global Health Cluster in major humanitarian crises. It is unclear, however, how a public health emergency fits into the wider humanitarian system and at what point an outbreak becomes a humanitarian emergency that requires a broader United Nations-wide response that would include coordination with the many nongovernmental organizations on the ground. This is one of the defining factors of the Ebola crisis. The Panel was surprised that many donors, governments, the United Nations and international nongovernmental organizations understand only one or the other system. If there is to be a closer working relationship, those involved need to know both systems. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) should take the lead in ensuring that key players (e.g. United Nations agencies and international nongovernmental organizations) are aware of the International Health Regulations (2005) and public health emergencies. WHO should ensure that its staff and stand-by partners understand the humanitarian system better. These roles and how they interact also need to be clarified and communicated to national governments. The WHO Centre for Emergency Preparedness and Response will need to help to create this understanding. Again, regular joint simulation exercises should be performed.

68. The purpose of the International Health Regulations (2005) is to alert the public health system and ultimately governments to public health hazards, their spread and severity. Individual countries and the global system can then respond to protect the health of people in a variety of ways. The emergency response framework has the rather different purpose of defining the level of resources, human and financial, required to provide a response to an emergency.

69. In some countries an infectious disease outbreak may require little or no support from outside, even should it escalate. More vulnerable countries with weaker public health and health care systems may require much more support and may even trigger the need for an emergency response under the emergency response framework. On the other hand, natural disasters or conflicts involving many people may require a grade 2 or 3 emergency response that is not related to any specific outbreak or threat to other countries.

70. WHO should consider how its own emergency grades and declarations of Public Health Emergency of International Concern (PHEIC) will relate to the emergency levels in the broader humanitarian system, in order to facilitate better interagency cooperation. At Emergency Response Framework Grade 2 and for the International Health Regulations (2005) intermediate level proposed by the Panel, there should be a discussion between the WHO Director-General and the Emergency Response Coordinator about what is required to prevent an escalation of the situation.

71. One of the difficulties to understanding is that the risk assessment of public health emergencies and so-called humanitarian emergencies differs, because of uncertainty in assessing the likelihood of disease spread. In a humanitarian emergency, staffing and other resource needs can often be more directly assessed. These two systems were not well integrated in the Ebola response. As one humanitarian agency leader said, "We didn't really pay attention to the Ebola outbreak at first, because to us the numbers were so small."

72. In the Ebola crisis there was some reluctance to engage the United Nations cluster system out of concern that this would lead to triggering a rather unwieldy cluster response, potentially bringing in all cluster leads and requiring complex coordination. However not all clusters need to be activated, only those appropriate to the particular circumstances of the health emergency.

73. Triggering of the cluster system will also bring in relevant international nongovernmental organizations and nongovernmental organizations. Owing to a lack of involvement on the part of the broader humanitarian systems, many of the resources of nongovernmental organizations from the countries and communities themselves were not mobilized in the early stages. Had other partners been involved, it would have enabled community engagement because nongovernmental organizations with considerable experience in communities, including in health campaigns would have been brought in. For example, in several countries UNICEF became the cluster lead for community engagement and coordinated a number of nongovernmental

organizations. WHO's relationship with nongovernmental organizations directly related to the health cluster must also be strong so as to be most effective during a health emergency.

74. WHO should have engaged the support of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and other United Nations agencies and humanitarian actors through the United Nations' Inter-Agency Standing Committee system early in the outbreak. Had the Standing Committee been engaged earlier in spring or summer of 2014, resources could have been made available and known systems put in place. This might have averted the crisis which led to the establishment of United Nations Mission for Emergency Ebola Response (UNMEER).

75. The Panel observed that there were a number of places where poor partnership with other stakeholders complicated and delayed the response to the crisis. WHO's ability to partner with the United Nations, the private sector and other non-State actors in the Ebola crisis was not as strong as needed. These relationships cannot be established during crises, but need to be developed when building preparedness.

United Nations Mission for Emergency Ebola Response (UNMEER)

76. UNMEER was established on 19 September 2014 after resolutions from the United Nations General Assembly and the United Nations Security Council on the Ebola virus disease outbreak in West Africa. At that point, it was clear that the Ebola outbreak was unprecedented and had outstripped the capacity of governments and international responders to exercise containment using traditional outbreak approaches. With over 7000 cases and nearly 2500 deaths, the outbreak had affected five countries and had crossed national borders. The three countries affected were isolated through trade and travel restrictions, and the international community response was insufficiently coordinated.

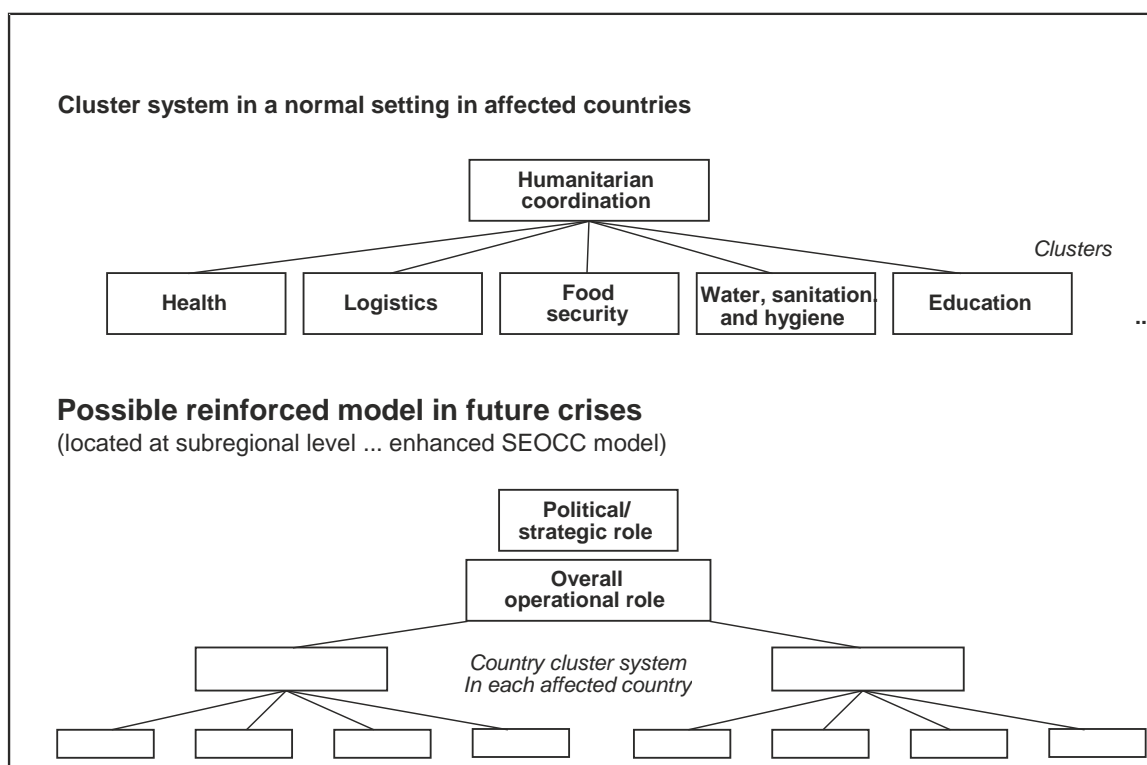
77. The Panel is clear that by September 2014, it was essential to take highly visible action to generate political and financial support from the global community. The United Nations Secretary-General's leadership was necessary in galvanizing the global community into a response, particularly in generating political and financial commitment by donor countries as well as in prompting the deployment of military personnel by some countries. Further, it triggered intensified responses from other United Nations agencies.

78. In the affected countries however, UNMEER was less successful. The mission functioned by bypassing existing mechanisms, rather than by engaging the United Nations cluster system. While the approach was adapted in countries where the United Nations Resident Representative was engaged with the system, there were other instances where the wider United Nations system was not effectively involved and pillars of work were not coordinated with the cluster structure. A number of stakeholders at country level also reported that the mission was unwieldy, and said that it took two critical months to establish itself at the height of the epidemic when parts of the existing cluster system could have been used instead. For these reasons, the Panel does not feel that UNMEER constitutes the appropriate model mechanism for managing future large-scale health emergencies.

79. When a crisis is contained within a country then the current model of humanitarian coordination may be adequate. When a crisis escalates and poses a high-level global health threat, global political support may be required. As was the case in the Ebola crisis, there could be a need for a very high level of political engagement and the appointment of a Special Representative of the Secretary-General or a United Nations Special Envoy. The Panel would strongly recommend against the establishment of a United Nations mission for future emergencies with health consequences.

80. In addition, at operational level an overall emergency coordinator may be needed; this person should preferably be based in the subregion. In the Ebola response, the subregional Ebola operation coordination centre (SEOCC) could have been the subregional location for emergency coordination.

Figure. Humanitarian system response



81. The SEOCC model had “buy-in” from the 11 countries that had requested a sub-regional coordination hub. As key implementing partners seconded their staff to the SEOCC, the costs of operating the SEOCC were less than the costs of operating UNMEER. Although the SEOCC was only in existence for about two months, because it was closed down when UNMEER was established, it generated a response not only from national authorities but also from donors and implementing partners. This model could be an appropriate means to escalate support in future (see Figure above).

The Panel recommends as follows.

18. **WHO** should consider how to coordinate its own emergency grades and declarations of Public Health Emergency of International Concern (PHEIC) with the emergency levels applied in the broader humanitarian system, in order to facilitate better interagency cooperation.

19. **WHO** should ensure that its staff and stand-by partners have a better understanding of the humanitarian system.

20. The **United Nations Secretary-General’s High-Level Panel on the Global Response to Health Crises** should emphasize the need for the United Nations system to understand the special nature of health risks, the International Health Regulations (2005) and the implications of declaring a Public Health Emergency of International Concern (PHEIC). The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) should take the lead in ensuring this for the wider humanitarian community.

21. The **United Nations Secretary-General** should consider – when a crisis escalates to a point where it poses a high-level global health threat requiring greater political and financial engagement – the appointment of a Special Representative of the Secretary-General or a United Nations Special Envoy with a political/strategic role to provide greater political and financial engagement. The Panel would not recommend the establishment of a full United Nations mission.

GOING FORWARD

82. When it took up its work, the Panel was hoping that by the time of its report the Ebola crisis would be over – it is clear that this is not the case. Although the number of cases has declined significantly, new cases are still being found in communities in Guinea and Sierra Leone among people who were not known to contact tracers. In Guinea especially, it is clear that communities do not “buy in” fully to what needs to happen and to their own responsibilities. Until that issue is resolved, very high alert levels need to be maintained. Meanwhile, the recovery process needs to move ahead. Health systems, even if weak and now with reduced numbers of trained staff, need to become fully operational again. The Panel has not reviewed recovery plans for health care or plans for broader economic development, but is pleased to see the United Nations and World Bank taking these forward.

83. Although this report brings the formal work of the Panel to an end, we will work closely with and continue to inform the work of the United Nations Secretary-General’s High-Level Panel on the Global Response to Health Crises, and will provide guidance to the work of the forthcoming IHR Review Committee for Ebola. We know that other bodies such as the G7, the African Union and the Institute of Medicine in the United States of America are also considering how to take forward these global public health issues. This is an indicator of the impact of the Ebola crisis and the need to act on our recommendations as swiftly as possible.

84. The Panel firmly believes that this is a defining moment not only for WHO and the global health emergency response but also for the governance of the entire global health system. The challenges raised in this report will be critical to the delivery of the sustainable development goals.

85. The Panel recognizes that it has made recommendations to many different actors and that these recommendations are interdependent in their implementation. Significant political commitment at both global and national levels is needed to take them forward.

ANNEX

COMPOSITION OF THE PANEL

1. Dame Barbara Stocking was appointed to chair the Panel. She was formerly Chief Executive of Oxfam GB, where she led major humanitarian responses. Currently she is President of Murray Edwards College, University of Cambridge, United Kingdom. The other Panel members are: Professor Jean-Jacques Muyembe-Tamfun, Director-General of the National Institute for Biomedical Research, Democratic Republic of the Congo; Dr Faisal Shuaib, Head of the National Ebola Emergency Operations Center, Nigeria; Dr Carmencita Alberto-Banatin, independent consultant and advisor on health emergencies and disasters, Philippines; Professor Julio Frenk, Dean of the Faculty, Harvard T. H. Chan School of Public Health, Boston, Massachusetts, United States of America; and Professor Ilona Kickbusch, Director of the Global Health Programme at the Graduate Institute of International and Development Studies, Geneva, Switzerland. (detail bios: www.who.int/csr/disease/ebola/panel-biographies/en)

OBJECTIVES AND TERMS OF REFERENCE

2. Resolution EBSS3.R1 requested “the Director-General to commission an interim assessment, by a Panel of outside independent experts, on all aspects of WHO’s response, from the onset of the current outbreak of Ebola virus disease, including within the United Nations Mission for Ebola Emergency Response, in implementing the WHO’s Emergency Response Framework, and in coordination, including resource mobilization, and functioning at the three levels of the Organization, to be presented to the Sixty-eighth World Health Assembly”. The Panel’s terms of reference are to:

- assess the roles and responsibilities of WHO at the three levels of the Organization in responding to the outbreak and how these evolved over time;
- assess the implementation of the tools at WHO’s disposal (in particular the Emergency Response Framework, and the International Health Regulations [2005]) to carry out its mandate before, at the onset of, and during the outbreak;
- assess WHO’s actions at the onset of the outbreak and during the outbreak (timeliness, appropriateness, scale, effectiveness), including (i) coordination within the Organization and with Member States, in particular the directly affected countries, and other partners, (ii) resource mobilization and (iii) communications;
- assess WHO’s role within and its contribution to United Nations-wide efforts (within UNMEER);
- assess the strengths and weaknesses of those actions, determine lessons learnt that could be applied to the existing ongoing situation and for the future (including capacity, tools, mechanisms including coordination and communications, structures, ways of working, resources);
- provide recommendations to guide the current response and to inform future work, including with regard to the strengthening of organizational capacity to respond to outbreaks and the establishment of a contingency fund.

TIMELINE AND PROCESS

3. The Panel met on 30 March–1 April 2015 in WHO headquarters in Geneva. The agenda included: a review of the scope of the interim assessment and interactions with other assessments; and determination of the method of work and the work plan for the duration of the process. Briefings were given on: WHO’s mandate and financing, implementation of the 2011 IHR Review Committee recommendations, WHO’s role within UNMEER, and the current performance audit being conducted by the Office of Internal Oversight

Services. The Panel heard presentations on activities that took place throughout the outbreak, and plans for a Global Emergency Health Workforce and a Contingency Fund. The Panel interviewed, by videoconference, Mr Tony Banbury, Former Special Representative of the Secretary-General, First Head of UNMEER; Dr David Nabarro, United Nations Special Envoy for Ebola; and, in person, Mr John Ging, Director, Coordination and Response Division, United Nations Office for the Coordination of Humanitarian Affairs. The Panel also held a session with interested Member States, during which the Chair briefed Member States on the ongoing work and plans, and heard views on, and their expectations of the Panel's work.

4. The second meeting of the Panel was held from 19 to 21 April 2015 in Geneva. This meeting heard further briefings on the Global Emergency Health Workforce and the Contingency Fund, and also received an update on the performance audit being conducted by the Office of Internal Oversight Services. There were also briefings on Communications in support of WHO's Ebola efforts and an update on ongoing research and development activities. The Panel met with a number of other organizations which were involved in Ebola work in the affected countries, including Médecins Sans Frontières (MSF), the International Federation of Red Cross and Red Crescent Societies (IFRC), the International Organization for Migration (IOM), the Steering Committee for Humanitarian Response (SCHR), the International Council of Voluntary Agencies and Save the Children. At a session with the Member States, the Panel heard perspectives on WHO's role during the outbreak, in particular the strengths and weaknesses in its response, key lessons learnt during this period and areas for improvement in WHO.

5. The third meeting of the Panel was held from 24 to 25 June 2015 in Geneva. At this meeting, the Panel reviewed a draft report, held further discussions on specific areas and outstanding issues before finalizing the report and its recommendations.

6. Panel members also visited the three most severely affected countries, and the Regional Office for Africa as part of the overall intelligence gathering. During the country visits, the Panel met with WHO staff, national authorities, key partners and affected communities.

7. Panel members also met with, interviewed or received written inputs from various key informants including officials of United Nations agencies, governments, and partners involved in the response. The Chair also provided a briefing on the Panel's work to the United Nations Secretary-General's High-level Panel on the Global Response to Health Crises at its first meeting.

8. The Sixty-eighth World Health Assembly in May 2015 reviewed and discussed the Panel's first report, which further informed decision WHA68(10).

9. Throughout its deliberations, the Panel met with WHO staff including the Director-General, Deputy Director-General, Regional Directors, Assistant Directors-General, programme directors and other technical staff. While operating independently, the Panel frequently sought information from WHO's Secretariat, asking for clarifications of issues that arose during the information-gathering and report writing periods. WHO staff provided responses to many questions posed by the Panel and spoke informally and openly with Panel members. WHO provided the Panel with unfettered access to internal documents and Panel members signed non-disclosure agreements in order to review confidential documents.

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