THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG
Ministry of Health

European Commission

Conference "lessons learned for public health from the Ebola outbreak in West Africa – how to improve preparedness and response in the EU for future outbreaks"

Conference summary report

Mondorf les Bains, 12-14 October 2015

Table of Contents

1. Background

The Ebola outbreak in 2014 and 2015 in West Africa and the repercussions it had at international level have substantially changed our perception and understanding of global health security. In this context, DG SANTE, together with the Luxembourg Presidency, organised a conference on "lessons learned for public health from the Ebola outbreak in West Africa – how to improve preparedness and response in the EU for future outbreaks".

The event took place in Mondorf-les-Bains (Luxembourg) from Monday 12 October to Wednesday 14 October 2015.

The aim of this conference was to identify learning points arising from the Ebola epidemic which will be crucial to strengthen health security in the European Union, better prepare us for similar crises and put us in the position to respond rapidly, flexibly and effectively to emergencies and disease outbreaks in the future.

The outcomes of the conference will inform Council conclusions to be adopted by the Health Ministers in December 2015. The results will also be incorporated in the report on the lessons learned from Ebola that EU Ebola coordinator and Commissioner, Mr Christos Stylianides, will present to the European Council.

An award ceremony of the 2015 European Health Prize for NGOs followed the opening session.

Subsequently four workshops - run in parallel sessions – analysed:

1. the Ebola outbreak as a complex crisis: the EU response and inter-sectorial cooperation,
2. best practices for treatment and prevention including protection of health care workers, medical evacuation, diagnostic methods and vaccines,
3. communication activities and strategies addressed to the public and health professionals, and
4. the Ebola epidemic from a local challenge to a global health security issue.

Over 350 participants attended, including health authorities and experts from EU Member States, EU bodies, international and non-governmental organisations and projects working in risk and crisis management and communication who have been involved in the response in West Africa as well as in preparedness and response in the EU.

The following report will provide the reader with the main messages of the key speakers as well the recommendations based on the discussions in the four parallel workshops.

2. Opening session of the conference (Monday 12 October 2015)

The opening session of the conference was chaired by Mr. Martin Seychell, Deputy Director General of DG SANTE (Health and Food Safety).

2.1 Opening speeches

The official opening of this conference included speeches from Mrs Lydia Mutsch, Minister for Health of Luxembourg, Dr Vytenis Andriukaitis, European Commissioner for Health and Food Safety, Mr Christos Stylianides, European Commissioner for Humanitarian Aid and Crisis Management, Dr Margaret Chan, Director General of the World Health Organization and Mr Hermann Gröhe, Minister for Health of Germany.

Mrs Lydia Mutsch welcomed the participants and noted that the Ebola epidemic strikingly demonstrated that health is our most important capital. We need effective, strong and resilient health systems and the health dimension must be taken into account in all policies. Ebola is under control but we need to be vigilant. The cross-sectorial cooperation proved crucial for a strong response and Member States must be prepared for future outbreaks. It was a serious test for Decision 1082/2013/EU which proved its effectiveness. Globally, the WHO must be at the centre of the global response to such epidemics. Minister Mutsch stressed the importance of regular EU coordination meetings which allow decision makers to take informed decisions and welcomed the proofs of solidarity towards the affected countries but also between Member States, notably in the fields of hospital facilities and airborne repatriation, which have been made over the last months. Global governance on health issues must be revisited and concrete and efficient operational consequences must be drawn with the WHO at the centre of the reform drive. The Luxembourgish Presidency of the Union is willing to push this issue forward and put it high on the political agenda.

Dr Vytenis Andriukaitis expressed his gratitude to the participants. Margaret. Chan and he just returned from the G7 health ministers meeting chaired by Mr. Gröhe, where they discussed the outbreak as well as the revision of the IHR and WHO reform. He recalled his visit to Guinea, Sierra Leone and Liberia with Commissioner Stylianides, an experience that left its mark since Ebola was devastating the country and a big blow to the region's development. The Commissioner emphasised one of the lessons he retained from his trip to West Africa: to prevent future outbreaks, we need to help vulnerable countries provide basic healthcare, clean water and sanitation to everybody. When Ebola hit, even the few existing businesses disappeared leaving

people living in unsanitary conditions and leaving a catastrophic impact on the social and economic life. He expressed his gratitude to the commitment of dedicated doctors and nurses who stayed in the field and underlined that their experience will be important to prevent future outbreaks. The 2 billion Euros of the EU response to Ebola helped to improve the situation in West Africa. Action was needed to prevent the virus from spreading to Europe, while ensuring evacuation of those carrying the virus. Not many Member States were in a position to treat Ebola. So the Commission activated and mobilised all tools at its disposal– including the Health Security Committee, the ECDC, and the Joint Procurement Agreement. Within the Health Security Committee the network of high security laboratories for diagnosis was activated. ECDC prepared guidance on infection control, transportation and equipment. Common case definitions for Ebola were agreed among Member States, expert workshops on treatment in healthcare settings were convened and the joint procurement mechanism was initiated for personal protective equipment. Exit screening was also organised in affected countries because it is of crucial importance to maintain open lines to air transport.
The first lesson to be kept in mind is preparedness. Member States need to be more alert, more cooperation is needed and more information must be shared. The second lesson is prevention. Complacency is the greatest risk, vigilance must be maintained. Lots of preventable diseases remain a Public Health challenge. The third lesson is promotion. We need to engage people and improve health literacy. Finally, we need to improve coordination and to bring together all players – in particular Humanitarian Aid and Public health sectors and structures need to work together.

Mr Christos Stylianides underlined that the Ebola crisis is now largely under control but that we should not lower our guard. With global population growth and climate change, more epidemics like Ebola may arise in the future and next time the international community needs to be better prepared. As concerns the EU response, there were things that worked well, there were tools that took time to be fully operational but ultimately worked well and lastly there were also areas where the EU could have done better. A total of 2 billion Euros was mobilised from Member States and the Commission for supporting partners like MSF, the Red Cross, as well as the UN and other NGOs, but also for recovery in the three countries and for research into vaccines and treatments. In addition, the EU's Civil Protection Mechanism was activated to assist in getting people and equipment from our Member States to West Africa. The coordination between the Commission, the External Action Service, all our Member States and key operational partners was successful and efficient, with daily meetings of the EU Ebola Task Force. The work of ECDC and of the European mobile laboratories was also much appreciated. The EU's medical evacuation system took some time to be fully operational, but has proved to be very useful. The key challenge now is to keep the basic elements of this Medevac system in place for future epidemics and for other medical emergencies. Finally, one of the biggest challenges was to rapidly mobilise medical teams. This is why we the idea of the "white helmets" idea has been taken up, developing a European Medical Corps as part of the "voluntary pool" of the EU Civil Protection Mechanism. This will allow Member States to make equipment and health personnel available for an immediate collective European response.

Dr Margaret Chan emphasised that the world is still ill-prepared to respond to severe and sustained outbreaks such as Ebola and other air-borne diseases, e.g. pandemic influenza. The International Health Regulations will be central as regard the aim of having robust response and resilient health systems, the IHR are the best way we can invest in preparedness. But also transparency: having the courage to report an outbreak is important in the beginning. The concrete lessons learned: first, compliance with IHR is paramount. While the agreement is signed by 194 countries, only one third have complied. Also, many countries self-assess their capacities positively but independent evaluations show different results, which is why the WHO promotes independent assessments. Second, capacities – health systems must be properly resourced, with

staff, equipment, availability of medical countermeasures, etc. Third, community engagement and culture is paramount – we need to invest more time to understand the culture. Coordination is also important – at WHO, at national and sub-national levels. Countries need to take ownership and leadership. Also, risk communication: we need to work with anthropologists so we can communicate with the communities. Finally, research and development must be scaled up for high-impact pathogens and WHO is working on a blueprint. The financing issue should also be considered and WHO needs to be properly financed, to allow long-term certainty.

Mr Hermann Gröhe noted the encouraging evolution of the Ebola cases. Civil society, Doctors without Borders, the UN and affected communities themselves deserve the most salutes. He expressed his thanks to the Commission, in particular DG SANTE and the Health Security Committee and DG ECHO for their contribution, as well as ECDC. Ebola is not defeated yet, we need to push the fight. Efficient and robust health systems are key. By 2019, Germany will make available €600 million available to allow the strengthening of third countries health systems. Full implementation of IHR is crucial. He welcomed the establishment of the European Medical Corps to which Germany is currently putting together its contribution. WHO has a central coordination role to play, WHO must be properly resourced and reformed. Today, the EU is considered relatively well-prepared, but still many things can be improved. G7 sent a strong political signal to strengthen health systems and support IHR implementation.

2.2 Feedback from Ministers

The second part of the opening session allowed other attending Ministers of Health or their representatives to provide feedback from their own lessons learned processes.

Dr Georges Pamboridis, Minister of Health from Cyprus stressed its own greatest lesson learned: never trust a virus and never be complacent. Second: invest in the health system and public health infrastructure. In Cyprus a national response panel was established and an Ebola committee set up. Preparedness and maintenance for a strong system was the main lesson learned. Cyprus partly failed in responding to the calls to put staff on the ground due to being a small country. Cooperation with partners is the only way to respond to such epidemics – constant exchange with the Health Security Committee, ECDC and WHO allowed Cyprus to stay well-informed. Also, the Joint Procurement Agreement is an important instrument for the ability of small countries to access markets for medical countermeasures such as personal protective equipment.

Mrs Jane Ellison, Parliamentary Under Secretary of State for Public Health pointed out that the United Kingdom will stay committed in the on-going response in West Africa until the zero case objectives has been reached. Main lesson learned: we need to act quickly in terms of both response and surveillance. UK is ready to improve its own early warning system. UK is also establishing a rapid response team who will be in permanent stand by to deploy within 48 hours. The global health security depends on accessible medical countermeasures, such as vaccines. The EU mobile laboratories provided crucial capacity; a vital contribution and useful tool to leverage EU's enormous capacities in this respect. The Medevac capability is also important.

Mr Marijan Cesarik, Vice-Minister of Health (Croatia), stressed that as a result of adequate communication with the Commission, Croatia was able to create its own risk assessment and develop procedures for receiving, treating and isolating potential patients. Training and capacity building of medical professionals relied also on ECDC expertise. Even with Ebola no longer in the public eye, it is our obligation to maintain vigilance.

Mr Arvydas Skorupskas, Adviser to the Minister of Health of Lithuania, underlined that the viral disease in West Africa reminded us that communicable diseases do not respect borders. EU was quick in replying and setting up measures in all sectors. For small countries, coordination of preparedness and response was essential. The main lesson: information sharing and rapid risk assessments are essential. Lithuania followed recommendations of WHO, the Commission and ECDC for preparedness and response. Training for health and other sectors were carried out, especially as regards the right use of personal protective equipment.

Mrs Paivi Sillanaukee, Permanent Secretary to the Ministry of Social Affairs and Health (Finland) underlined that another disaster may happen and that we should be prepared. At global level, the IHRs provide a global level commitment but they lack implementation and enforcement. The EU showed great commitment by adopting Decision 1082, now it is important to focus at country level capacity. The EU made progress but more can be done. Communication, cross-sectorial cooperation and preparedness are important, as is the Medevac capacity. Finland is a strong supporter of the Global Health Security Agenda (GHSA), whose aim it is to support countries in capacity-building to create multi-sectorial responses to crises. GHSA carries out country assessments, which should not be seen as a substitute for IHR assessments but as supporting the implementation of the IHR.

Mrs Christine Fages, Ambassador and co-ordinator of the inter-ministerial Ebola Task Force, Ministry of Foreign Affairs, France, highlighted that the Ebola crisis was unprecedented. We must build on our collaborative model, which should be established and tested before future crises. During the crisis, France played a role in training medical personnel and deploying medical staff on the ground. Inefficient health systems are a threat to health security. We need to invest in national public health systems, including outside times of crisis. Public health is a topic for all stakeholders. It is an investment not a cost. France is organising a high-level conference in Lyon in April 2016 to discuss the IHR reform.

3. EU Health Award 2015 ceremony

The opening session was followed by the EU Health Award 2015 ceremony. It was chaired by Mr. John F. Ryan, Acting Director of the Public Health Directorate (DG SANTE C).

The EU Health Award aims to highlight and reward initiatives of international, European, national and regional non-governmental organisations which have made a significant contribution to promoting a healthier EU and higher level of public health.
Prizes were given by Vytenis Andriukaitis, European Commissioner for Health and Food Safety, Christos Stylianides, European Commissioner for Humanitarian Aid and Crisis Management and Lydia Mutsch, Health Minister for Luxembourg.
The prize-winners were selected from 26 worthy candidates by an EU Jury, composed of public health specialists and representatives of EU non-governmental bodies chaired by the Commission.

- The first prize of 20.000€ was awarded to the Alliance for International Medical Action (ALIMA), for the initiative "Emergency medical response to the Ebola Virus Disease". ALIMA's regional emergency intervention to Ebola resulted in the opening of a 40-bed Ebola Treatment Centre and outreach activities in Guinée Forestière region, infection and prevention control measures in Mali and Senegal, and conducting of a clinical trial on an anti- Ebola treatment with the French National Medical Research Institute INSERM.
- The second prize of 15.000€ was awarded to Concern Worldwide for the initiative, "Safe and Dignified Burials Programme, Freetown, Sierra Leone". Concern Worldwide is part of a consortium that took over the management of 10 burial teams from the government of Sierra Leone in October 2014. This included the management of two cemeteries, grave digging staff, and transport teams. Concern Worldwide's support teams collected over 5,500 deceased bodies from the community and the health facilities. Of these, at least 97% were buried within 24 hours of being reported.

- The third prize of 10.000€ was awarded to the Spanish Red Cross for the initiative "West Africa Ebola outbreak relief operation". Amongst their many activities, the Spanish Red Cross supported the creation and management of two Ebola treatment centers in Sierra Leone, provided psychosocial support for the population affected by the outbreak, and helped monitor the health of irregular migrants travelling from the affected areas to the EU. They also developed several activities to inform the Spanish population about Ebola and reduce the stigma.

4. Panel discussions with stakeholders

A panel discussion, chaired by Nick Gent (Public Health England), involving major international key players provided some food for thoughts to the discussions of the two following days.

Dr Andrea Ammon, acting director of the European Centre for Disease Prevention and Control (ECDC), took a stand for preparedness as an extremely cost-effective measure to mitigate the impact of Public Health crises. Preparedness together with country support needs to be addressed on a wide scale and in a coordinated manner. She underlined the discrepancy between self-assessment and external evaluation points (as also mentioned by Dr Chan) towards the need to provide country support, e.g. by assessment visits. She called for a concertation of the visits between WHO, GHSA and ECDC. When replying to a question by the audience who suggested that there is no need for so many current activities on medical workforces she underlined that it is important to build on existing capacities, but that these were insufficient during the Ebola crisis and should therefore be reviewed and where necessary strengthened.

Mr Panu Saaristo, International Federation of Red Cross (Headquarter –Geneva), elaborated on the importance of having a local organisation that is well connected to its public authorities and communities as well as resilience of the health systems in affected countries. Local civil society and national health workers play a major role; any intervention should build on their assets and experience. Moreover, he stressed the importance of caring for doctors and nurses when returning from the field. Some countries refused to take home their own citizens because they lacked capacities to treat them; this undermines the willingness of people going into the field. The Red Cross is assessing its own systems so that resources are deployed with the same agreements, e.g. same insurance schemes and assurances for evacuation.

Ms Hilde de Clerck, Médecins sans Frontières (MSF), gave important insight into the engagement of MSF in affected countries by putting it in a chronological perspective so to outline points in which lessons and the need for improvement became visible. In particular, she expressed appreciation of the cooperation with the European mobile laboratories. She also underlined that the lessons learned from the 1970s Ebola outbreaks remain valid today.

Mr Guillaume Grosso, GAVI-Europe office, elaborated on the severe impact of the Ebola and similar crises on vaccination campaigns in affected countries. Moreover, he stressed that it cannot be taken for granted that there will be access to a vaccine for Ebola, simply because there is no market. The possibility for a vaccine existed for years, but was not taken forward. Peace times also serve to prepare the medical countermeasures that will be needed. GAVI creates incentives to enable continuous vaccine developments.

Dr Paul De Raeve, European Federation of Nurses Associations (EFN), made a strong call for the engagement of nurses and social workers in policy design to ensure better preparedness in the EU and making sure policies are "fit for practice" to prevent contamination. The fear and concern spreading among the families and friends of nurses caring for Ebola patients was a major concern in some key reference hospitals and the frontline nurses suffered from stigmatisation. Although a manual and some training were

developed in the EU based on identified gaps, the guidance for nurses were not deemed fit for reality and there were many uncertainties that put at risk not only the health and safety of the nurses and other professionals but of the citizens at large. There is a strong need for hands-on guidance, efforts to contrast the stigmatisation and social exclusion of nurses who are caring for patients with Ebola. Council conclusions are therefore key as they need to provide political and professional guidance on where we should be in the 28 Member States. Council conclusions need to reflect the real needs of people working in the field and should include actions on training, stakeholders' engagement and fighting stigmatisation. If not, they stay a theoretical exercise with no impact on fieldwork.

Dr Guenael Rodier, WHO Regional Office for WHO, paid special attention to the human resource aspects of staff being deployed and working in Ebola affected countries. During Ebola it was particularly difficult at the peak of the epidemic to find French-speaking deployable staff for Guinea; this lack of willingness was aggravated by the tendency of their home countries to retain competences close at hand. Operational difficulties range from language needs to be able to work and communicate efficiently to legal, logistical and security concerns. Legal issues, but also insurance and assurance to deployed staff about practical arrangements, from actual terms of reference, level of accommodation, precise site of deployment to medical evacuation, contributed to the delayed in WHO and global response. He called upon volunteers to show the necessary flexibility in order to respond so such situations. It is also difficult to preview how staff reacts when facing both the epidemic and the context of working in resource-poor African countries. He thanked ECDC for their contribution through staff, EPIET/EUPHEM fellows and experts from institutions of EU Member States.

Professor Paul Cosford, Public Health England, stressed that during an ongoing crisis efficient communication with the public is key, to address fears and misinformation. Moreover, it serves to keep public and political confidence up and to justify continued engagement directly in affected countries. Another pillar to reassure the public is thorough risk assessment and if possible a quantitative estimate of the risk.

Ms Barbara Bentein, UNICEF, gave the perspective from a childcare point of view and with regards to the collapse of basic care during Ebola. She underlined that this kind of health crisis requires a cross-sectorial, multi-disciplinary response, ensuring that all actors work together is very important. Moreover, she stressed the criticality of community ownership and engagement, support from anthropologists and social scientists. The speed of information flow, data protection legislation and declaration of public health emergencies of international concern (PHEIC) have been major obstacles for a faster and more effective response.

Dr Nicole Lurie, Assistant Secretary for Preparedness and Response at the U.S. Department of Health and Human Services, shared aspects of response from the Global Health Security Initiative (GHSI) perspective. From the US perspective, it has worked as a forum for open and constructive mutual support, also for information sharing on a nearly weekly basis and problem solving. She also stressed the importance of prioritising research areas and scientific questions that need to be answered in these contexts. Moreover, she underlined the importance for efficient cooperation with regulatory authorities in order to support efficient trials and rapid access to medical countermeasures.

5. Main conclusions from the 4 workshops

The second and third days (morning) were dedicated to workshops' discussions.

- The aim of the **workshop 1** was to allow participants to discuss the main issues which contributed to make the Ebola outbreak in West Africa a 'complex emergency situation' or a 'complex crisis' and to agree on main messages indicating areas which deserve special attention to improve the EU public health response in case of a similar future event.

- The aim of the **workshop 2** was to allow participants to exchange good practices and discuss lessons learned related to pre-clinical management, clinical management and Ebola research response.

- The aim of **workshop 3** was to highlight areas for development in the EU's Emergency Risk Communications procedures in response to future outbreaks.

- **Workshop 4** invited participants to consider the EU preparedness and response planning as part of global health security in the context of the Ebola outbreak in West Africa. It focused on issues that could improve the EU public health preparedness and response should a similar outbreak occur in the future.

Workshop 1: The Ebola outbreak as a complex crisis: the EU response and inter-sectorial cooperation.

Overall considerations

The Ebola epidemic showed the need to be better prepared in order to face efficiently the next major health emergency. Elements such as coordination, risk assessment processes and intersectoral cooperation are paramount for a good preparedness planning.
Issues related to risk assessment of the situation during the early phase of the outbreak and how the assessment and its impact evolved until the declaration by the WHO Director General of the Ebola outbreak a public health emergency of international concern need to be better analysed. This concerns in particular how the information was received internationally, including the impact it had in terms of organization of the response in the early phase of the outbreak. Identifying gaps and strengths in this early phase, underlining the main elements of complexity of the situation, is instrumental for a better preparedness.

A better understanding of the coordination mechanism in place as from the declaration of the outbreak as a public health emergency of international concern is also needed. It is important to grasp how the new legislation in place on serious cross-border threats to health (Decision 1082/2013/EU) has been instrumental in supporting the risk management and the coordination of the response at EU level. This includes the role of the Health Security Committee formally established under the Decision.

The Ebola epidemic has resulted in the interaction between public health, humanitarian aid, civil protection and development and cooperation sectors. Identifying and understanding the main challenges to cooperation among sectors is paramount. These aspects include the need of working beyond the EU borders in close cooperation with third countries, non-governmental organisations, international bodies and the private sectors.

The Ebola outbreak also highlighted the need for action in areas which usually do not always get sufficient attention, such as border issues (exit and entry screening), medical evacuation, the mobilisation of specific expertise for EU and the affected countries, transport facilities for big amount of waste related to the laboratory and clinical activities in the EU, the sample sharing and contact tracing.

Recommendations for action

- Risk assessments should include scenarios (which should take into account knowledge, attitudes and practices in the affected countries) that can help EU and its Member States to translate the message into preparedness actions and response.
- A peer-review mechanism could help Member States to improve their national preparedness plans taking into account past and current initiatives on independent country evaluations on global and regional level.
- Implementation of Decision 1082/2013/EU Art 17 on the coordination of the Health Security Committee should contribute to a stronger decision making and to a reinforced strategic response.
- The Joint procurement agreement needs to be further developed and mechanisms for effective use and training during an on-going emergency situation need to be explored.
- Training and exercises should be emphasized as a key mechanism, e.g. for effective deployment in the field.
- Strategic leadership and response coordination are required from the earliest stage of the crisis in each MS, at EU level and globally (WHO, UN).
- The EU should contribute to clarifying and strengthening mandates within the global response architecture (WHO, UN institution) and at EU level. There is also a need to clarify mandates at Member States level.
- The response coordination needs to be truly inter-sectoral including civil-military collaboration and all inclusive (all hazard approach, all stakeholders, and at field level).
- The early targeting of resources and funding as well as consequent transparent tracking thereof should be improved.
- National ownership by affected countries should remain paramount as concerns response coordination.
- Lessons learned from previous incidents should be implemented.

Health Security Committee to reinforce the strategic response

Intersectoral response coordination mechanism

Effective use of the joint procurement agreement

Workshop 2: Best practices for treatment and prevention including protection of health care workers, medical evacuation, diagnostic methods and vaccines.

Overall considerations

The Ebola outbreak also created a lot of challenges in area such as the transport and medical evacuation of people suspected or confirmed with Ebola, as well as the protection of health care workers, hospital preparedness, treatment approaches and availability of treatments and adequate material such as personal protective equipment.

Research and pharmaceutical industries were heavily involved in identifying, developing and testing new treatments and vaccines.
This workshop tried to answer the numerous issues underlined above, and consequently suscitated the numerous recommendations listed below.

Recommendations for action

➢ Transport of people with confirmed or suspected infectious disease of high impact (IDHI)

- Airborne Medevac is one core mechanism for safeguarding health and safety of European citizens and healthcare workers deployed outside Europe to emergencies caused by any IDHI. Therefore, it is important that EU solutions are put in place, in order to offer reliable solutions for medical evacuation to workers deployed as part of the European response to emergencies.
- State of the art capacity for airborne Medevac and ground transportation in Europe requires a shared and long-term financial engagement of countries and international institutions.
- Operational ground transport systems are essential for integration with air-transport and for exploiting cross-border European treatment capacities for IDHI.
- State of the art capacity for airborne Medevac and ground transportation in Europe means a 24/7 capability to safely transfer any patient whatever their clinical condition including patients with airborne transmissible IDHI.
- An inventory of European capabilities and intra-operability for air and ground transport (including staffing) should be established and maintained.
- Regulatory and financial aspects of cross-border transport of IDHI patients within Europe need to be addressed in advance.

Long term financial engagement for Medevac and hospital preparedness needed

- **Staff protection for IDHI in European healthcare settings**

  - Building staff capacities for caring and management of patients with IDHI means implementing and strengthening of existing occupational safety and health regulations.
  - Efforts in establishing common standards for specifications and use of PPE within Europe should be intensified by engaging nurses who are operational in the field. This starts with a coordinated procurement of PPE components among Member States.
  - Procuring appropriate PPE and providing regular training makes nursing staff comfortable and confident in treatment settings for IDHI. This asset needs to be protected from shortcuts in hospital-budget or staff-patient ratio.
  - Different approaches in use of PPE are not acceptable and therefore should be based upon agreed principles and a rationale by making sure that frontline staff is protected.
  - European progress in standardization and procurement of PPE need to interface with international initiatives relevant for global standards and availability of PPE.

Implementation of infection prevention and control standards before emergencies

Intensive care treatment is decisive for the cure of EVD patients

- **First assessment of patients with IDHI and infection control**

  - Infection prevention and control standards need to be implemented before an emergency from an IDHI occurs. This applies in particular for critical structures such as emergency departments or intensive care units.
  - Guidance for initial assessment of persons under investigation for EVD in Europe should be made available for any other IDHI. Such guidance needs to target various working environments in healthcare and also consider options for assessing a large number of possible cases ('triage').

- **Hospital preparedness for patients with IDHI in Europe**

  - Building and maintaining specialist capacities in hospital preparedness for IDHIs requires a long term funding perspective.
  - Procedures for caring and management of patients with an IDHI in hospitals need to be tested regularly with frontline through simulation exercises.
  - Complementary Europe-wide exercises are needed to test cross-sectoral and cross-border coordination and cooperation for emergencies from IDHI.
  - A European pool of experts from all disciplines involved in the caring and management of patients with IDHI could act as a mobile resource in providing cross-border support wherever needed.

- **Current treatment approaches for Viral Hemorrhagic Fever- patients in Europe**

  - The ability to provide the full range of intensive care treatment in a high isolation setting is decisive for the outcomes of patients with EVD. EC and Member States should aim to make this standard accessible throughout Europe.
  - WHO's clinical peer support network showed to be a key resource for the treatment of medically evacuated patients. The EC and Member States should closely liaise and cooperate with the network to provide support to clinicians in less resourced settings.
  - Clinical research for IDHI should be part of the established clinical care protocols and also consider medically evacuated patients.
  - Existing European initiatives should work together to further strengthen pan-European capacities to conduct clinical studies of IDHI (including observational, operational, and investigational new drug (IND) trials).
  - The EC should invest in clinical research in sites outside Europe where IDHI are occurring to inform patient care both inside and outside of Europe.
  - The EC should invest in clinical research in sites inside Europe where IDHI are occurring to fight against stigmatization.

- **Vaccines, Medicines, Diagnostics and Personal Protective Equipment**
  - The EU should play a central role in ensuring global preparedness through medical counter measures.
    - EU funding bodies should collaborate with other funders of IDHI research through the GLOPID-R, to develop a strategic plan for globally coordinated research and development for IDHI that encompasses inter-epidemic and epidemic clinical epidemiology, vaccine and drug development, diagnostic standardization, and PPE. This plan should cover the whole product development pipeline.
    - The EU contribution should be integrated in the global R&D landscape and should involve industry.
    - Significant public sector investment is needed to realize a Pan-European R&D plan for IDHI.
    - In case of IDHI emergencies the marketing authorisation process is often not feasible due to time constraints. For these cases the regulatory framework allowing for the use of the product and access needs to be defined in protocols specific for IDHI emergencies.
    - EU institutions should support international organisations having a multi-country oversight regarding authorization of trials for IDHI.

Global collaboration and funding in research needed

- **Lessons learned on research response**

  - Establish in advance legal, regulatory, and organizational frameworks to resolve issues of intellectual property (IP) ownership, access/pricing and mass deployment.
  - Establish in advance legal, regulatory, and governance frameworks for bio-banking and facilitate access to pathogen and patient samples for all qualified researchers.
  - The BSL 4 laboratory network should be supported as an integral component of the European response to IDHI within and outside of Europe.

Workshop 3: Communication activities and strategies addressed to the public and health professionals.

Overall considerations

The dynamic of the Ebola crisis and the multi-sectorial response generated challenges as well as opportunities for communicating with internal and external target audiences - such as the public; at risk groups; governments and responding organisations – in affected countries, globally and at a European level.

The following conclusions were agreed to be relevant for the future Emergency Risk Communications (ERC) preparedness and response in relation to any emerging and infectious pathogen with pandemic potential
As a pre-condition, the Health Security Committee (HSC) communicators' network needs to be operational and active. EU Member States and EEA Member states should be actively encouraged to contribute to the network activities.

Recommendations for action

- Emergency Risk Communication is an integral part of any emergency response and crucial to its management and coordination. Communications planning and training need to be embedded in all preparedness and response programmes. Preparedness activities should include preplanning for various levels and types of public health emergencies and sharing these ahead of identified threats. A "communication warning system" notifying communicators about possible communication challenges should be set up.
- The European Commission plays a crucial role in reassuring the public that the EU is acting in a coherent and coordinated manner, with due respect to national competencies.
- Information and communications activities and materials as well as lessons learned for EU countries in any major health emergency should be coordinated at EU level. A coordination mechanism at EU level should include: 1) a password protected central common operating platform for shared communication products and messaging, 2) the development of ERC guidance and standard operating procedures as well as training and exercises on these guidelines and procedures, 3) the exchange of communication strategies and messages (if possible prior to release) 4) the sharing of intelligence about risk groups identified in each Member State,5) the sharing of the results of focus group and other research activities on public perception, 6) the sharing of evaluations and lessons learned outcomes, 7) the availability of a central and publicly accessible platform (linking original websites of Member States and involved organisations) for the sharing of information relevant to all aspects of the emergency, and 8) the evaluation of communication messages and strategies.
- Member States communications staff from Health Ministries /health agencies should support the European Commission in these efforts.
- The framework for health communications between EU/EEA Member States and the European Commission is the Health Security Committee's Communicators' Network (HSC ComNet). During the Ebola outbreak in West Africa, the European Commission

organised Task Force Meetings and Health Security Committee meetings as efficient platforms for information sharing.

- Other organizations' networks such as those of the Global Health Security Initiative (GHSI) and the World Health Organization (WHO) can also play a key role in exchanging information. All networks need to be connected and all the relevant partners need to be included in the exchanges from the beginning of an emergency. A mapping of these international networks is required.
- The timely development of communication materials is paramount for maximising resources to reach the public and other more specific target groups. Sharing materials and templates among partners and stakeholders helps to communicate early and coherently. EU/EEA Member States and the European Commission should work together to identify ways to share information and activities proactively, effectively and efficiently and to build on existing ERC publications. Products and messages should be sharable without copyright restrictions. This may require the development of common sharing agreements between EU/EEA Member States and the European Commission.
- Setting up a central repository of all communication materials (from international partners, agencies and national authorities) is recommended.
- Possibilities for joint communications between EU/EEA Member States, the EU, civil society and key stakeholders (such as NGOs and health professionnals' organisations) to more systematically communicate have to be explored.
- The European Commission should provide and maintain a password protected platform for aggregating communications material from the existing sources. This secured file sharing system should also allow for the consistency and alignment of messages and needs to include the early sharing of approved lines to take, of infographs, of questions/answers, of messages and any other relevant communications material. It should allow for national customisation.
- Coordinating joint communications activities at the national and EU level should include engagement with stakeholders such as the civil society, relevant sectors, and partner agencies including but not limited to WHO, the European Centre for Disease Prevention and Control (ECDC), the European Food Safety Authority (EFSA), the European Medicine Agency (EMA).
- It is important to understand the perceptions, knowledge and behaviours of European citizens during a health crisis and the differences across segments of the population and countries. Failure to do so can lead to wasted resources, and unanticipated consequences such as spreading fear and loss of trust in the authorities. Qualitative data, polls and surveys are essential tools for achieving this understanding. These can be supplemented by analysis of traditional media, social media and online comments. Rapid analysis of such data will help communicators to identify gaps in knowledge and cultural barriers as well as false rumours, and thereby assist in crafting appropriate ERC strategies. This should include trusted messengers. The strategy should be subjected to evaluation and results should be shared with all stakeholders as necessary to refine the strategy.
- A plan for evaluating the impact of ERC strategies must be established before an emergency and conducted during and after the crisis. The data collection methods, the models and the results should be shared between countries as a source of information

Health Security Committee Communicators' network fully operational and active

Emergency Risk Communication; an integral part of any emergency response

Consider deployment of trained communication experts to affected countries

and exchange of good practices. EU/EEA Member States should share the findings from the evaluation with the European Commission and each other.

- A timely and multi-channel strategy, which includes digital technology, is required to ensure effective communications with target audiences. Toll-free telephone lines, SMS messaging, social media (Web 2.0) channels are increasing rapid and accessible and will offer new possibilities for reaching out specific target groups. They also help spotting early warning signs, user behaviours and trends and can help disseminate information about the emergency and public health advice. EU/EEA Member States and the Commission should be encouraged to invest in two way communications tools which will foster an understanding of and response to community concerns. A checklist of channels that communicators can use (e.g. aide memoire so people don't forget radio, faith groups, and posters in community venues) should be developed.
- Face to face access to technical experts for journalists should be developed and encouraged to build trust and to convey information. The identification of trusted messengers is necessary.
- During the Ebola outbreak in West Africa, ERC was not considered to be a major pillar of the response in the EU and the support from the Commission and EU/EEA Member States to affected countries and WHO was not as timely and strong as needed.
  a) The Commission, EU/EEA Member States, United Nations agencies, non-governmental organisations and other stakeholders should ensure that ERC is brought into the mainstream of the preparedness and response and that communications experts work with their technical/political managers in Europe.
  b) The EU should consider the deployment of appropriately trained communications experts to the affected countries to support building and/or maintaining trust in the authorities and in public health advice. These experts should not only train local communicators but also learn from them, to ensure that messages and the local response are culturally sensitive. For every team deployed from an organization, there should at least be one communications officer.
- The Ebola outbreak revealed that the Commission and some national Health authorities lack the rapid access to budgets for communication during a crisis and that the contractual procedures are too complex and cumbersome to produce communication material - such as videos - at short notice. Rapid procurement processes should be put in place at the EU and or national levels so that in case of a public health emergency, a responsive and effective allocation of resources can be facilitated.

Workshop 4: The Ebola epidemic from a local challenge to a global health security issue.

Overall considerations

The unprecedented outbreak of Ebola virus disease (EVD) in West Africa demonstrated the need for a robust preparedness and response planning within all countries. The main countries affected by the EVD outbreak had little or no preparedness and response planning. EU Member States with demonstrable preparedness and response mechanisms where able to meet the challenges of dealing with large numbers of aid workers returning and those repatriated with Ebola or symptoms consistent with Ebola.

While preparedness at country level is very important, in order to enable immediate response when a public health threat occurs, preparedness has to also be strengthened at European and global level to support those countries facing threats that they cannot deal with alone.

The lessons learned from the Ebola outbreak should be further considered when reviewing future preparedness and response arrangements in relation to outbreaks of emerging and re-emerging pathogens and with the potential to cause pandemics or creating a requirement for WHO to alert the global public health community An IHR Emergency Committee should be convened even before declaring a Public Health Event of International Concern as provided for in the International Health Regulations 2005.

The development of innovative mechanisms for managing clinical cases of Viral Haemorrhagic Fevers and other aetiological agents with outbreak potential is vital. Best practices such as training and exercising of appropriate teams and individuals, and their implementation need to be developed during non-outbreak periods.

Recommendations for action

- Capacities and the use of IHR at local and regional level should be strengthened and leadership provided.
- The work of local and regional actors and European assistance should be coordinated.
- Preparedness inside the EU also needs to be strengthened, including through specific manuals and training protocols for clinical staff for Ebola or other pathogens.
- The EU capacity to prepare and respond to emergencies with public health implications should be strengthened by operationalising the European Medical Corps, as part of the European Emergency Response Capacity under the EU Civil Protection Mechanism, and of the Global Health Emergency Workforce.
    - Investing in further developing emergency medical teams, in line with the WHO classification, and making them available for international operations;
    - Developing public health preparedness, assessment, response and recovery teams, in order to contribute to IHR implementation;
    - Strengthening the international role of the ECDC in line with its mandate in support of preparedness and response to disasters and public health threats;

- Supporting mobile biosafety laboratory capacities and their cross-border and international deployment, by building on the EMLab and other experiences;
- Developing requirements, training and certification procedures for above teams and experts, and ensuring their swift deployment;
- Addressing issues linked to legal and administrative barriers to the deployment of experts and teams, security, insurance, logistical support, medical evacuation, and facilitation of the deployment of international responders by host countries (i.e. recognition of the right to practice, work methods);
- Looking into issues linked to the sustainable provision of clean water and sanitation services, environmental and food safety mobile laboratories in collaboration with other service providers, etc.;
- Identifying capacity gaps and goals for the assets in the European Medical Corps;
- Engaging with the wider humanitarian and public health communities and strengthening the existing global coordination mechanisms within the Global Health Emergency Workforce including the Global Health Cluster, Emergency Medical Teams and Global Outbreak Alert and Response Network;
- Welcoming the commitments made by Belgium (mobile biosafety laboratory), Luxembourg (Advanced medical post), the Czech Republic (advanced medical post), Sweden (Technical assistance and support team) and the Netherlands (Technical assistance and support team) to the European Medical Corps, and encouraging other MS to consider further commitments in order to make the European Medical Corps fully effective.

- The innovations achieved for Ebola towards a smarter, more scalable and sustainable response should be built up and sustained.
- Cooperation between public health and development aid partners and other key actors at various levels should be enhanced to better coordinate and integrate public health considerations in resilience building and response to emergencies. To this end, common response plans and further joint trainings, exercises, exchange of best practices, cross-sectoral guidelines, should be pursued.
- The Commission's Emergency Response Coordination Centre should be further developed as an information exchange and coordination platform at EU level in public health crises originating from outside the EU, in close cooperation with the Health Security Committee.
- Bi- and multilateral mechanisms should be created for mobilising national experts from public health institutes to support the use of the IHR. The use of the European Medical Corps should to this end be explored.
- Health Systems should be strengthened towards resilient systems to include core capacities for IHR implementation reinforcing epidemiological surveillance for all countries.
- The EU should commit to strategic health aid programming in countries falling below the minimum public financing necessary to achieve Sustainable Development Goals and to mitigate the risks of disease outbreaks. As a matter of urgency, effective EU interaction between Council bodies for health and foreign affairs should be encouraged to engage in a process in this sense.

Strengthen and operationalize the EU medical corps

Global governance and coordination mechanisms based on the WHO framework

Strengthen exit screening through setting up of a European operational network and training

- Evidence based capacity development in preparedness and response should be generated and supported. The WHO should be assisted towards an operational approach for preparedness reinforcing public health.
- In fragile state and humanitarian crisis contexts, the main health actors are often humanitarian agencies. Consequently, improved global health governance should ensure both a timely application of EU humanitarian and related resources in global outbreak response, and the inter-operability of these resources with the humanitarian health response.
- Exit screening practices should be strengthened through setting up of an EU operational network and training.
- Operational arrangements should be developed and maintained, including European Medical Corps to support national public health measures at points of entry and engage with other sectors involved in crisis response.
- A global governance and coordination mechanism based on the WHO framework such as the Global Research Collaboration for Infectious Disease Preparedness should be established. This should include:
    - Establishing close links with public health stakeholders with a view to prioritisation;
    - Mapping ongoing research, identifying research (capacity) gaps, and setting out R&D priorities;
    - Facilitating and coordinating the implementation of preparedness research programmes;
    - Ensuring the interaction and linkage of all sectors in the development of clinical trials and their outcomes.
- The variety of funding instruments to ensure funding of the Infectious Diseases of High Impact (IDHI) research pipeline should be used.
- The global capacity for preparedness research should be strengthened, for example through the European and Developing Countries Clinical Trials Partnership.

6. Concluding session

During the closing session, chaired by Mr John F. Ryan, Acting Director of the Public Health Directorate (DG SANTE C), rapporteurs from the four workshops provided the main recommendations and conclusions of their working groups to the plenary. In addition distinguished representatives from the Presidency, the Commission and Chatham House draw their conclusions. A summary of these speeches is provided below.

Dr Elizabeth Heisbourg, Deputy Director at the Luxembourg Ministry of Health, underlined that the conference was a unique exercise gathering a broad range of stakeholders, including those who were directly involved in the management of the Ebola crisis. She stressed the importance of taking into account the voice of the NGOs which managed the crisis. Dr Heisbourg further summarised the most important conclusions from different speakers pointing out the need to work harder in the fields of communication, risk assessment and response capacities as well as preparedness. It is of vital importance to support intersectoral cooperation and to maintain the capacities built up. She recalled the conference organised under the Belgian Presidency in 2010 after which the Ministers of health adopted the conclusions related to the 2009 influenza pandemic H1N1. She stated that the Ebola epidemic showed again the crucial role of risk communication for cross-border health threats. Subsequently, Dr Heisbourg underlined the key role of the Health Security Committee in the risk assessment, risk management and dissemination of information. The role of the ECDC should not be neglected as it provided epidemiological updates. She stressed the need to build on the lessons learned from the Ebola crisis for which the conference provided an excellent basis for the Council conclusions which will be adopted in December. The whole exercise should contribute

Jean-Louis de Brouwer: Director of Operations at the European Commission, Directorate General for Humanitarian Aid and Civil Protection, called for the implementation of the lessons learned into concrete actions. Regarding the EU framework, some of the measures taken were efficient and therefore should be maintained and sustained for future use. An example is the medical evacuation system which the Commission has now the experience to use effectively but it is an expensive tool to maintain on permanent standby and therefore needs to be made 'resuscitable' for future crises. He highlighted the work being done on establishing such systems as part of

a future European Medical Corps and emphasised the impressive commitment of all stakeholders to work further on these positive lessons. Mr. De Brouwer stressed that needs assessments at an early stage of an outbreak are essential, pointing out that the EU should have its own assessment capacities. The visibility of the Commission's actions should be improved by ensuring better coordinated communication within the Commission Services but also with the Member States and the international organizations. On the issue of the Global Response Architecture, the Commission acknowledges the leading role of WHO and supports its reform in order to become fit for purpose. Close cooperation with the Member States on this issue must be ensured. He mentioned the sound practice that was adopted by some Member States of appointing an Ebola ambassador, a person who coordinated actions and communicated updates to interested parties; which helped to save time and avoid confusion. Finally he stressed that he Commission needs to play a leading role in the process of helping affected countries to improve their epidemic surveillance and response capacity, notably by contributing to building better and stronger health systems.

Dr David Heymann, Head of the Centre on Global Health Security at Chatham House and Professor at the London School of Hygiene and Tropical Medicine delivered the presentation on the shifting paradigm from rapid detection and response to prevention. Dr Heymann recalled the history of the Ebola virus and its modes of transmission from the 1970's until the most recent Ebola crisis.

He elaborated on the three strategies that can rapidly stop the spread of the virus:

- Patient identification, isolation and protection of health workers/infection control
- Surveillance/contact tracing and fever surveillance with rapid diagnosis and isolation
- Community understanding with safe patient and body transport systems, safe burial and household/environmental decontamination.

Until 2014, rapid detection and rapid response were the two key tools which prevented the Ebola virus to turn into an epidemic. An analytical description of the last Ebola epidemic was presented regarding the affected areas, epidemiology of the virus and patterns it followed. He further referred to the development of the vaccines against Ebola that proved to be effective. Therefore the research on vaccine testing should continue. Dr Heymann underlined the crucial role of the joint communication. In addition he underlined the concept of 'One Health' which remains a veterinary concept but is gradually taking hold in human health. There is also need for joint efforts and better coordination between Ministries of Health and Ministries of Agriculture in order to tackle a large crisis such as the Ebola virus.

In order to prevent Ebola outbreaks and its international spread, the health facility infection control and knowledge/skills should be strengthened to prevent amplification; communities should be engaged in understanding risks through the traditional channels as well as through NGO networks. Last but not least, public health capacities should be reinforced to rapidly detect and respond to a crisis.

He pointed out that in order to prevent future importation of emerging infections in Europe we should:

- support rapid outbreak detection, risk assessment and response through WHO through the Global Outbreak Alert and Response Network (GOARN);
- support capacity building in developing countries;
- maintain core capacities, including infection control, within Europe;

- support research and development of vaccine and diagnostic platforms that can accept antigens from newly merged infections as well as to stimulate research and development of new antimicrobials;
- continue to strengthen a one health approach – activity at the animal/human interface.

Mr Xavier Prats Monné, Director General for Health and Food Safety in the Commission, highlighted that the Ebola epidemic was a wake-up call. He reiterated the need to strengthen health systems in countries most in need but also underlined that Ebola has implications on the public health field in the European context as well. Health is the competence of Member States. The Commission has a limited but significant role to support Member States. The EU can provide added value in a number of areas. The first pillar to provide support to Member States is preparedness; the main instrument to take forward preparedness and response planning at EU level is Decision 1082/2013/EU on serious cross-border threats to health. It is the Commission's task to support the Member States through the Health Security Committee; the ways of providing such support must be explored further and capacity building should be improved to better enable preparation for crisis. With the help of the HSC the Commission will stay committed to identify existing gaps. Peer reviewed assessments of capacities could be tested through simulation exercises which could be conducted in collaboration with WHO and ECDC. The second pillar is cross-sectoral cooperation within the Commission Services as well as with third parties. Large exercises will take place in 2016 and they should be better used. The third one refers to networks and communication. Proper and efficient communication, networking with the MS and joint work with the WHO are the key elements. During a crisis the EU should not be isolated; instead collaboration with the WHO as health emergency manager is essential. The Commission supports the WHO's efforts to strengthen international governance of the International Health Regulations. The question should be posed: will we be ready to face a new infectious disease/epidemic in the imminent future? Mr Prats Monné confirmed that the Commission officials are committed and ready to support the Member States.

Next steps

Mr John F. Ryan underlined that the recommendations made during the conference will inform conclusions of the December Health Council. The results will also be incorporated in the report on the lessons learned from Ebola that EU Ebola coordinator and Commissioner, Mr Christos Stylianides, will present to the European Council.

These recommendations will pave the way for preparedness activities in the coming years both at EU and national levels.

DG Health and Food Safety (DG SANTE)

Directorate for Public Health

Health Threats Unit (C3)

Luxembourg

Contact: SANTE-CONSULT-C3@ec.europa.eu

For more information:

- **Web address:** http://ec.europa.eu/health/preparedness_response/
- **Twitter handle:** @EU_Health