GLOBAL CONFERENCE ON BIOLOGICAL THREAT REDUCTION | *Building cooperation for efficient health and security systems worldwide* | 30 JUNE – 2 JULY 2015 MAISON DE LA CHIMIE, PARIS

Final Report

Executive Summary

The World Organisation for Animal Health (OIE) hosted the first Global Conference on Biological Threat Reduction in Paris, 30 June – 2 July 2015.

For the purposes of the Conference, 'Biological Threats' or 'Biothreats' are threats that result from or are exacerbated by infectious diseases of animals (including zoonoses) which may arise from natural or manmade disasters, laboratory accidents or from the deliberate manipulation or release of pathogens.

The Conference, which was held in collaboration with the World Health Organization (WHO), brought together world leading scientists, educators, and key decision makers from international organisations and national governments. The participants who represented the public health, animal health, ecosystem health, and security sectors came from more than 80 countries.

The meeting was broadly divided into 3 parts:

1) Experts set the scene by highlighting some of the biological threats arising from nature, accidents, conflict and crime. They also described the complex network of international agencies (each with its own mandate and membership) which makes up the framework for global preparedness against Biological Threats.

2) Solutions to some of the challenges that health systems face in combating Biological Threats were shared through case studies and didactic presentations. This included One Health approaches to combatting antimicrobial resistance; approaches to sustaining health services during times of instability; laboratory capacity building initiatives; networking; public-private partnerships; and gap analyses tools aimed at improving compliance with intergovernmental standards for health systems

3) A discussion engaged representatives from the security sector, animal health, ecosystem health, and public health sectors, and next generation leaders to develop common agreed messages to advocate for sustainable investments in health systems.

Some key points which were highlighted during the meeting included:

- Animal pathogens (including zoonoses) will remain a threat to animal health, public health and economies. They will have a disproportionate impact on areas of the world which have weak health systems or suffer from civil instability. Globalisation, climate change, civil instability and ecological disturbances create opportunities for the emergence and spread of infectious disease.

- Intervention strategies will only remain effective if science and technology keep pace with pathogen evolution.

- Several countries have developed effective models to successfully respond to specific emerging health threats, such as antimicrobial resistance. These experiences can be shared with other countries.

- There are a diverse range of national and international agencies engaged in biological threat reduction. Although there is no formal mechanism for coordination, these agencies are establishing functional relationships through more frequent and closer contact, formal agreements, and joint activities.

- Science-based intergovernmental standards, which are set and agreed by the OIE for animal health and by the WHO for human health, offer a universal and comprehensive framework for the structure and governance of national public health and animal health systems. The strength of national animal and public health systems underpins the ability of a country to prevent, detect and respond to biological threats whether they arise from nature, accidents or a malicious act.

- The impact of a national health system extends beyond its borders, with strong national health systems reducing Biological Threats for neighbouring countries, whilst weak national health systems may increase risks to the international community.

- There are various tools for evaluating the quality and governance of national health systems. The tools offered by WHO and the OIE have been developed, standardised, and universally adopted by their Member Countries, and are now being successfully applied in most Member Countries.

- Once infectious diseases have been eradicated special risks arise from the potential for accidental or deliberate release into a naïve population where surveillance and control mechanisms are no longer active. Political obstacles prevent the total destruction of infectious material. Unless the international community takes meaningful action to fulfil their obligations to destroy and sequester eradicated pathogens (smallpox and rinderpest), risks will increase over time as more diseases become eradicated.

- The maintenance costs of high containment laboratories are significant. If these costs are not considered before construction, the facility may become a burden on the hosting country. If sufficient resources are not available to maintain infrastructure, biosecurity risks may actually increase. Sustainability can be optimised by considering a long term business case for the laboratory in the context of national laboratory networks, and by applying risk based strategies for biosafety and biosecurity.

- Scientific engagement through twinnings and networking, including exchanges of students and experts, is proving to be effective in building capacity and developing common

understanding amongst animal and public health professionals. Veterinary education establishments have significant potential to positively influence the attitudes of future professionals in terms of ethics, responsible science, and in developing an international perspective.

- Public-private partnerships have an important role to play in sustainable capacity building and preparedness against Biological Threats in both developed and developing countries

- The animal health, public health, and security sectors have a common interest in strengthening public and animal health systems. Functional health systems can detect and respond to all biological threats and they support food security and poverty alleviation. Poverty alleviation and food security in turn support civil stability. In general terms, the social and economic costs and benefits of investing in health systems far outweigh the costs of responding to a preventable biological disaster.

- Whilst the importance of collaboration between animal health, public health, and ecosystem health (the 'One Health' concept) is widely accepted, the level of engagement between health and security sectors at national level varies significantly; few countries have a formal relationship between health and security sectors. There are advantages to enhancing cooperation between the public health, animal health and security sectors to increase coordination and to share resources for mutually beneficial strengthening of health systems.

Recommendations:

The following recommendations were drafted based on information shared and discussions which took place during the Conference. Participants were provided with the opportunity to comment on the recommendations during the closing session of the meeting and for a period of 10 days following the meeting, when the draft recommendations were posted on the OIE website.

The participants of the Global Conference on Biological Threat Reduction recommend that:

1. The strength and governance of national animal and public health services must be improved globally to reduce threats and consequences of infectious diseases that result from nature, laboratory accidents, and the malicious use of biological agents. To achieve this, public and private sector animal and public health policies together with investments in the systems needed to support these policies should be considered a priority in all countries.

2. At national level, animal health, public health and security sectors should engage with each other to discuss areas of mutual interest, to share resources where appropriate, and to ensure that biological threat reduction is a cross-cutting national agenda item.

3. International and national simulation exercises should be multi-sectoral, engaging the security sector, and the public and animal health sectors. They should also include the relevant private sector stakeholders to the fullest extent possible.

4. International organizations, agencies and donors should encourage the evolution of public and private sector partnerships (with farmers, private sector veterinarians, paraprofessionals, relevant stakeholders and local community leaders) for effective prevention, preparedness, response and recovery planning and the establishment of trust at the community level.

5. International organisations, agencies and donors involved in advancing compatible health and security objectives should strive to speak with one voice in their engagement with global and national leaders, to:
    a. Promote opportunities for cost savings through the balanced sharing of resources between animal and public health sectors;
    b. Demonstrate the significant social and economic benefits of investing in animal and public health systems (which comply with intergovernmental standards and have sufficient capacity) to achieve health and food security and greater political stability.

6. There should be continued public and private sector investments in animal and public health systems to advance scientific knowledge, technology and diagnostic methods which will improve rapid disease detection, confirmation and reporting, to reduce the magnitude, duration and consequences of disease occurrences.

7. Efforts should be made on the part of both the animal and public health sectors to improve the quality and quantity of data (including data on animal disease burden) that is collected and shared in order to provide for more meaningful and robust analyses.

8. The OIE should consider further expanding and deepening its collaboration with other international organizations, with an emphasis on those agencies whose work in reducing risks from biological disasters is aligned with the mission of the OIE and the OIE's Biological Threat Reduction Strategy. This should include the United Nations Secretary General's Mechanism (UNSGM), Biological Weapons Convention (BWC), United Nations Office of Disarmament Affairs (UNODA), UN Security Council Resolution 1540 Committee, INTERPOL, United Nations Office for Disaster Risk Reduction (UNISDR) on the implementation of Sendai Framework, the World Customs Organization (WCO) and the Global Partnership against weapons of mass destruction (GP).

9. The OIE should consider drafting more detailed standards to provide guidance to reduce risks from deliberate and accidental releases of pathogens from animal sources, and to develop specific methodologies to investigate the suspicion of such events.

10. The OIE should develop international guidance for veterinarians and the veterinary education community, in collaboration with law enforcement experts, on forensic investigation and response to infectious animal disease outbreaks where criminal activity is suspected.

11. The donor community should consider providing additional support to the joint OIE-WHO PVS-IHR operational framework for good governance at the human– animal interface, which

is based on adherence to the One Health concept and compliance with intergovernmental standards for the quality of national health systems. This should result in the involvement of a greater number of countries in national bridging workshops and relevant follow-up.

12. The OIE should encourage its network of Reference Centres to regularly review and analyze potential emerging biological threats.

13. The OIE and the FAO should continue to advocate the destruction of all rinderpest virus containing material or its transfer to a limited number of approved holding facilities before May 2018.

14. The OIE should continue to provide guidance on sustainable implementation of laboratory biosafety and biosecurity standards, including standards for the safe production, handling and rapid transport of biological material. This guidance should be adaptable to the country situation and resources available, and should complement the PVS Laboratory Tool and OIE Manual.

15. The OIE, with the support of the donor community, should continue to support twinning programs for laboratories, veterinary statutory bodies and veterinary education establishments as a means of building capacity, engaging next generation leaders, strengthening international scientific networks, and reducing biological threats.

16. The OIE should continue to encourage Member Countries to comply with standards for the quality of Veterinary Services by undertaking PVS pathway assessments, and respecting the standards adopted in the Terrestrial and Aquatic Animal Health Code for effective disease control, safe trade and electronic certification. Such efforts should include critical assessments of relevant country legislation to ensure that Veterinary Services have the necessary legal basis to act effectively and efficiently in the face of biological threats.

17. The OIE should continue its efforts, in collaboration with veterinary education establishments, to refine the day one competencies, consider ethics as integral to education curricula, and develop on-line continuing education and learning tools, making them available to all Member Countries.

18. The OIE, in collaboration with the public health, security, and disaster risk reduction communities, should consider holding similar conferences in the future to build on the cooperation, insights and engagement arising from the Global Conference on Biological Threat Reduction on a rotational basis. It is proposed that the next Global Conference be hosted by INTERPOL.