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Introduction: Changing Realities in Emerging Zoonoses

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In the three years since this International Conference on Emerging Zoonoses was last held there have been significant changes in both the spread of numerous zoonoses and the manner in which zoonoses, both new and old, are perceived by scientists, governments and the public. Although the term "foreign animal/human diseases" is still widely used there is near unanimous awareness that such diseases are transboundary diseases, in which an outbreak in any country can spread rapidly throughout the world. Therefore, the recent outbreaks of Hendra virus in Australia and Nipah virus in Bangladesh constitute significant disease threats not only in those countries but to any country. Furthermore, the sporadic occurrences of the highly lethal H5N1 influenza virus and the existence of more transmissible human and avian influenza viruses of different subtypes threaten both animals and people with the dangers of new reassortants . The danger of such an unwanted event has not lessened, whatever the amount of publicity about influenza.

It is crucial to understand that we cannot predict which emerging zoonosis in which country will suddenly become a disease of epidemic proportions. Rift Valley Fever, dengue fever and African Swine Fever are perhaps the three emerging diseases most in need of immediate vaccine development. However, Ebola-Marburg viral diseases, Hendra and Nipah viral diseases and SARS (Severe Acute Respiratory Syndrome)—the first pandemic of the twenty-first century—are just as likely to become the next focus of international concern. Meanwhile, malaria continues to kill many people in Africa and Asia with impunity, despite encouraging advances in vaccine development and treatment.

In the midst of such a complex and changing disease environment, those gathered for this 6th International Conference on Emerging Zoonoses sought to share their own work and to listen to the ideas and hopes of other scientists. The flippant phrase about the need "to network" in order to advance one's career is a gross travesty of the purpose of any international conference, for it is only by meeting and sharing and listening that we can hope to improve the quality and relevance of our research. None of us have all the answers, but hopefully some of us have a few of the answers. Rather, it is not so much "answers" that we seek but sensible preparation, grounded in alert anticipation of the options for where and when the next significant disease outbreaks might occur.

No doubt there will be multiple unexpected disease events before we next gather in 2014 in Berlin. There is a high probability that the zoonotic disease that concerns us most at

the next conference will be some newly emerging disease, such as the recently discovered Schmallenberg virus. However, there is one reality that will not change. Veterinary medicine and human medicine and environmental awareness are the three foundations on which One Health is based and the only way that we can successfully confront changing realities in emerging and re-emerging zoonoses.