

# One World, One Health?

Since the 1997 outbreak of H5N1 avian influenza in Hong Kong, and the subsequent death of six people, the world has been expecting the next pandemic pathogen to originate from poultry in Asia. Instead, a different flu virus has struck – H1N1 – originating from pigs in America. We should not be surprised. For all that is certain about influenza viruses and their impacts is that uncertainty prevails.

The international response to H5N1 has affected the livelihoods and businesses of millions. Markets have been restructured, surveillance and poultry vaccination campaigns implemented, and over a billion birds have died or been culled. Simultaneously, substantial investment has been made in human and animal health systems and developing drugs and vaccines. In many countries, pandemic contingency and preparedness plans have been devised.

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What lessons can we learn from this experience? How can future efforts to respond to emerging infectious diseases – particularly zoonoses – be improved? The “One World, One Health” approach (see Box) has driven some novel thinking, and led to some valuable new structures and alliances, but challenges remain: coordination at the country level has been found wanting; international cooperation is still often challenged; rivalries between professions and organisations persist; and funding and capacities for an effective and equitable global response to a pandemic remain weak.

### ■ Policy narratives

Three overlapping policy narratives – storylines about policy problems and

solutions – have guided the response to avian influenza:

- **Veterinary, agriculture and livelihood concerns:** *“it’s a bird disease and affects people’s livelihoods”*. Responses focus on veterinary control measures and industry restructuring involving mainly FAO (the UN Food and Agriculture Organization) and OIE (the World Organisation for Animal Health).
- **Human public health:** *“human to human spread is the big risk, and could be catastrophic”*. Responses dominate media and political concerns and focus on drugs, vaccines and behaviour change. WHO (the UN World Health Organization), UNICEF (the UN Children’s Fund) and some NGOs are central.
- **Pandemic preparedness:** *“a major economic and humanitarian disaster is around the corner, and we must be prepared”*. Responses focus on civil contingency planning, business continuity and containment. A wider network of business and industrial interests are concerned along with government/local authorities and the humanitarian community – UN agencies, the Red Cross, development NGOs and others.



Photo: FAO/Hoang Dinh Nam

*The culling of millions of birds severely impacted on the livelihoods of poor people.*

Each narrative is promoted by different policy actors and interest groups. Furthermore, each offers different understandings of the problem, and so different solutions. Each competes for policy attention and funds. All however are defined by an over-arching 'outbreak narrative' which emphasises distinct outbreaks, followed by focused control, and ultimately the elimination of the disease. United by this narrative, and involving substantial investment of public funds (over 2 billion US dollars has been pledged to the effort), the international response has resulted in some significant achievements:

- Surveillance and control of the disease in some areas
- Improved capacity of animal and human health systems
- Development of pandemic preparedness plans
- Improved co-ordination across agencies.

Fundamentally, however, a number of dimensions are absent from the standard outbreak narratives. These include:

**Dynamic drivers.** Understanding the underlying drivers of disease – and the socio-ecological dynamics of emergence – must be part of any international response. Zoonotic disease hot spots exist where reservoirs of disease from animals are found close to densely populated areas. Often, these are settings where animal and human health services are weak, regulation lax, and human-animal contact common. Yet in many such places, people are used to living with infectious disease. They have deeply embedded understandings that influence the way they respond. These may be at odds with standard medical and veterinary perspectives, resulting in conflict between official programmes and local responses. A perspective focused on the dynamics of disease and local responses sets the agenda wider than the standard outbreak-treatment-erad-

*To prevent a new pandemic, concerted actions are needed for surveillance, improved public and animal health systems and communication strategies.*



Photo: laif

ication mode. Ecosystems and their interactions must be examined, and social-cultural-livelihood interactions made central.

**Poverty and equity.** What is the distributional impact of disease burdens and control responses? If the problem is framed as an emergency – focused on human pandemic threat – culling chick-

ens is seen as a necessary evil which, if compensated for, offers a substantial public good benefit. But from the perspective of those whose livelihoods depend on poultry, such interventions can be catastrophic. In the same way, industry restructuring towards bio-secure, large-scale units favours corporate interests. This has consequences for people's livelihoods. Currently, the

## “One World, One Health”

The “One World, One Health” concept first emerged at a 2004 symposium organised by the Wildlife Conservation Society in New York. The event focused on disease movements among human, domestic animal, and wildlife populations, and identified priorities for an international, interdisciplinary approach to combat threats to animal, human and eco-system health. The resulting “Manhattan Principles” listed 12 recommendations for establishing a more holistic approach to preventing epidemic/epizootic disease and for maintaining ecosystem integrity and biodiversity.

These ideas were picked up at the 2007 Delhi International Ministerial Conference on Avian and Pandemic Influenza, at which a road map was developed encouraging governments to build links between human and animal health systems and invest in capacity for preventing and controlling infectious diseases in animals, both internally and with neighbour nations. These objectives sat well with the 2005 revision of the 1969 International Health Regulations, which signalled an important shift in the international governance of public health issues, with a ceding of national sovereignty, at least in theory, in the face of a global threat.

In October 2008, four specialised agencies – the FAO, OIE, WHO and UNICEF, together with the World Bank and the UN System Influenza Coordinator (UNSIC) – presented a consultation document (‘A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystems Interface’) in response to the New Delhi recommendations. It built on lessons learned from the response to the H5N1 panzootic, urging enhanced disease intelligence, surveillance and emergency response systems at national, regional and international levels, improved public and animal health services, and effective national communication strategies.

political economy of the food and farming industry is obscured by the technical disease focus of the outbreak narratives. With a normative focus on poverty and equity, we must ask: whose world, whose health – and which public, which good? The question is not only about controlling a disease: it must also ask for whom, and with what distributional consequences?

**Global governance.** The international response assumes that there is a global consensus that can be implemented through an international system based on the principles of cooperation and respect. This allows early detection, rapid response, viral analysis, timely provision of drugs, vaccines and so on. For some, the avian influenza experience offers a shining example of the potential of global health governance, and the effectiveness of the International Health Regulations. However, a focus on access and rights – particularly for those not normally at the table – means simple formulations of ‘global governance’ are more difficult to realise than first envisaged.

### Sources for more information

Links to the original documents and the project from which the text is drawn are at: [www.rural21.com](http://www.rural21.com)

This issue is also explored further in a forthcoming book: Scoones, I. (ed.) (2010): *Avian Influenza: Science, policy and politics*. Earthscan: London.

### One World, One Health: ten challenges for the future

The table contrasts the focus of the international response to avian influenza over the last five years with the challenges for the future.

Theme	Focus for the avian influenza response	Challenges for the One World, One Health agenda
Outbreaks and endemism	Disease events and diseased areas	Emphasise dynamic drivers and endemic contexts
Risk and uncertainty	Risk and risk management	Implications of uncertainty, ignorance and ambiguity
Surveillance and information	Disease incidence and outbreak tracking	Focus on underlying dynamics of change to identify emerging hot spots
Ethics, equity and access	Ethical, distributional and access issues peripheral	Equity and access – who gets access? Whose world, whose health?
Health security	A protectionist, national security stance	An inclusive, rights-based human security vision
Global governance and accountability	A universalist, consensual globalism, upward accountability to donors	A politically realistic perspective on governance, recognising different interests and agendas. More inclusive downward accountability
Organisational architectures	Lead technical Agencies with defined mandates, backed by efficient funding mechanisms and light-touch coordination	Building on the model, aiming for ‘Optimal redundancy’, avoiding forced integration, but maintaining a nimble, flexible coordination ‘movement’
Disciplines and professions	Veterinary and health professionals dominate	Need for more ecologists, epidemiologists, economists and social scientists, including anthropologists, sociologists and political scientists. And ‘non-professionalised’ local experts
Programme design and implementation	Standard designs and blueprints based on outbreak narratives, with local ad hoc adaptation in the field	Accepting flexible design and adaptation from the start, based on subsidiarity and participation
Success and impact	Success and impact indicators based on outbreak narratives	Widening the scope requires widening the visions of success, focusing on long-term disease intelligence and response

### Zusammenfassung

Ausgehend von holistischen, auf Öko-Systemen beruhenden Ansätzen zur tierischen und menschlichen Gesundheit und unter dem Einfluss der Vogelgrippe hat das Konzept „Eine Welt, eine Gesundheit“ zu einem bemerkenswerten Umdenken und zu neuen Allianzen und Strukturen geführt. Trotz unterschiedlicher Formulierungen wird das Konzept nach wie vor ‚ausbruchorientiert‘ angewandt, das heißt, es konzentriert sich auf die Eingrenzung der Ausbruchsherde, auf die gezielte Kontrolle und letztlich die Ausmerzungen der Krankheiten. Ein ver-

stärktes Augenmerk sollte jedoch auf die sozioökologische Dynamik des Auftretens von Krankheiten, die unterschiedliche Ausbreitung und Verteilung der damit verbundenen Belastungen und die Kontrolle und Komplexität des globalen Gesundheitsmanagements gelegt werden.

### Resumen

El concepto “Un solo mundo, una sola salud” – que ha surgido de enfoques holísticos y ecosistémicos frente a la salud animal y humana, impulsado también por la “pandemia” de la influenza aviar – ha

llevado al desarrollo de nuevas formas de pensar, alianzas y estructuras. La formulación varía, pero el concepto todavía se tematiza en gran parte a través de una “narrativa epidémica”, que hace hincapié en pandemias de características únicas, un control dirigido y – en última instancia – la eliminación de la enfermedad. Es necesario poner mayor énfasis en la dinámica socio-ecológica del surgimiento de enfermedades, el impacto distributivo de la carga infecciosa y el control de las epidemias, así como en las complejidades de una gobernabilidad global de la salud.