Case 1: Surveillance systems

A key question raised by recent changes in the WHO's International Health Regulations is whether surveillance systems and national healthcare infrastructures can be made compatible, if not mutually beneficial. One answer is 'holistic' or integrated surveillance systems that can meet multiple information needs with one infrastructure. Accordingly, with the anticipated completion of the Global Polio Eradication Initiative in mind, WHO has introduced an integrated surveillance programme to 'mainstream' the Initiative's extensive system of trained personnel, facilities and management structures. The impact of such top-down 'mainstreaming' on local communities is uncertain. Limited research on successful integrated regional surveillance systems emphasises the importance of simple reporting procedures, low costs, personal rapport between organisers and people in the network and regular feedback of information. The language of integration may not yet go far enough in guaranteeing national or local health policy self-determination.

STEPS centre

Epidemics for all?
Governing health in a global age

Alongside climate change and terrorism, epidemics capture the contemporary imagination of a vulnerable, interconnected earth. Bursting from a confined area onto the world stage, epidemics demonstrate precisely the kind of combustible unpredictability that fuels fears of systemic, global risks.

With emerging and re-emerging infectious diseases on the rise over the past several decades, the risks of regional or even global epidemics of diseases have increased. The most feared of these risks is that avian influenza will mutate into a highly infectious and virulent form of human influenza, causing a global pandemic. But the complete list of diseases with the potential to become epidemic is long: co-infections of HIV/AIDS and multi-drug resistant tuberculosis, malaria, newly emerging and highly infectious viral diseases such as Ebola and Marburg, and a growing worldwide resistance to frontline antibiotics.

'Fast twitch' responses to 'slow twitch' causes

This rise in epidemic risk is the result of a complex combination of social, ecological, environmental and economic factors, including changing patterns of land use

Lisa Vanovitch / avian flu operation / iStockphoto

More reading

Epidemics for all? Governing health in a global age, STEPS Working Paper 9 by Sarah Dry (2008) ISBN 978 1 85864 543 3

Dynamic Systems and the Challenge of Sustainability, STEPS Working Paper 1 by Ian Scoones, Melissa Leach, Adrian Smith, Sigrid Stagl, Andy Stirling and John Thompson (2007) ISBN – 13: 978 185864 650 2

Pathways to Sustainability: an overview of the STEPS Centre approach by Melissa Leach, Ian Scoones and Andy Stirling.
ISBN – 13: 978 1858646561

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Credits
This briefing was written by Sarah Dry and edited by Julia Day.

About the STEPS Centre

The STEPS Centre (Social, Technological and Environmental Pathways to Sustainability) is an interdisciplinary global research and policy engagement hub uniting development studies with science and technology studies. We aim to develop a new approach to understanding, action and communication on sustainability and development in an era of unprecedented dynamic change. The STEPS Centre is a collaboration between the Institute of Development Studies and SPRU Science and Technology Policy Research at the University of Sussex with a network of partners in Asia, Africa and Latin America and is funded by the Economic and Social Research Council. Find out more: www.steps-centre.org

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and migration, climate change, travel, urbanization and healthcare interventions. The complexity of these interconnected factors - which operate at every scale from the smallest family to international global health organizations - make it impossible to predict exactly when and where an epidemic might arise, and the best way to prevent it from happening. In light of such uncertainty, the need for multiple ways of understanding and addressing, epidemics is greater than ever before.

Yet the current formulation of epidemics policy on the global scale, using global language, has largely adopted a 'fast-twitch' approach to a problem that most agree has plenty of 'slow-twitch' causes: epidemics-oriented policy has become a policy of rapid response rather than long-term commitment. It often takes the form of highly focussed emergency programmes dependent on sensitive surveillance systems that are 'tuned' to daily, or weekly events, rather than long-term programmes that respond to longer-wave feedback about environmental and social factors and may be more sustainable. As a result, supposedly 'broad' or 'comprehensive' approaches to the global epidemics risk are often more narrowly conceived than many projects oriented to local, or regional contexts and concerns.

"Epidemics-oriented policy has become a policy of rapid response rather than long-term commitment"

Pluralised governance and new sources of outbreak information
The organizational landscape of global health has become increasingly pluralised with the increasing prominence of non-governmental actors such as charitable foundations and partnerships such as the Global Fund to Fight AIDS, Tuberculosis and Malaria. These new power relations have created uncertainty about which organisations, if any, are 'in control' of global health policy. The importance of national security and

sovereignty issues remains undiminished despite omnipresent rhetoric about diseases that 'know no borders.' Issues of coordination, integration and harmonisation have accordingly come to the fore.

Meanwhile, in response to the communications revolution wrought by cell phones and the Internet , the World Health Organization has made important changes in its International Health Regulations which, for the first time, enable unofficial sources of information to contribute to decision-making about the control of epidemics. (See Case 1) However it is unclear what effects these combined changes will have on our ability to manage complex epidemics risks and on the world's most vulnerable citizens. Pluralised or 'unregulated' policy environment may provide a useful level of redundancy to global systems, protecting the global system against rigid consensus or unexpected shocks. But an uncoordinated policy landscape is not necessarily a diverse policy landscape. The struggle to 'succeed' in a disordered environment may force organisations, or states, to adopt very similar strategies — highly focussed, time-limited interventions with easily measurable outcomes — in order to reduce their risk of failure. Even calls for integrated disease surveillance, intended to combat some of these tendencies, do not go far enough in incorporating alternative models of health and disease into a unified platform representing the best interests of all global citizens.

Creating feedback loops
One answer is to provide ways in which these alternative and often competing models can feed into each other: fast-twitch problems help signal slow-twitch transformations; local knowledge is seen to be a form of global knowledge; official knowledge systems feed unofficial ones. Such feedback loops are another way of introducing reflexivity into policy-making. This can change more than just how we talk about the dangers of epidemics: it can also change what is

Vaccination / Sean Warren / iStockphoto

"By giving local people control over epidemiological information… it is possible to change the meaning of global health to include more sustainable and equitable measures of health for all."

seen to be the purpose and aim of global health policy. By giving local people control over epidemiological information, or defining infectious disease events in terms of long-term environmental change or migration patterns that occur over years and decades, it is possible to change the meaning of global health to include more sustainable and equitable measures of health for all.

Key Challenges
- Recognise that organisational complexity, or plurality, in global health policy does not guarantee conceptual subtlety or programmatic diversity. Uncover implicit assumptions behind models of 'shared global risks' that privilege rapid response mechanisms foreground rapid response while undermining longer term, community-led interventions.

- Create integrated disease surveillance systems that move beyond simply combining disease-specific programmes into multiple-disease systems. Bring the health and health information needs of local communities on an equal footing with global surveillance needs. . Such systems will depend as much on establishing effective civil registration systems as they will on creating clinical evaluation procedures.

- Acknowledge the on-going importance of national security and sovereignty issues, and the maintenance and strengthening of national healthcare infrastructures in light of global health risks. Sidestepping official state information channels under the WHO's new International Health Regulations may have a significant negative impact on the national healthcare infrastructures of the poorest and most outbreak-prone countries.