# Round table discussion

## Pandemic influenza and its definitional implications

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In his thoughtful analysis, Doshi aptly describes the need for establishing greater definitional precision of "pandemic influenza" as the basis for future public health preparedness and response efforts.[1] Importantly, his assessment highlights a critical ongoing divide between competing perceptions of the very concept of a "pandemic": namely, between "pandemic" as predominantly a function of geography and virology, versus disease severity.

This is not a minor semantic distinction, but rather one with enormous bearing on planning priorities. For instance, while the United States of America applies an all-hazards approach in its federal, state and local public health emergency readiness efforts, a major piece of 2006 national preparedness legislation was notably called the Pandemic and All-Hazards Preparedness Act.[2] Such explicit separation between "pandemic" and "all-hazards" in the title reflects a unique concern about a pandemic's potential impact and severity, with implications for resource-intensive planning efforts among a myriad of stakeholders. Additionally, milder-than-feared global infectious disease events can subsequently engender a dangerous sense of complacency among frontline responders and the general public, erode trust in public health authorities and potentially reduce compliance with essential protective guidance in the face of future threats.

In keeping with these important considerations, Doshi proposes a more severity-driven approach to the declaration of an influenza pandemic. This strategy has certain merits: research suggests that people are more likely to engage in desired protective behaviours in the face of uncertain risk if they perceive the threat to be legitimately severe and relevant to them (and thus motivating), and if they view the recommended intervention as efficacious.[3–5] This would argue for severity as the main definitional predicate for pandemic declaration, rather than geography and virology.

However, a primarily severity-based trigger for pandemic declaration would involve certain operational challenges that must be acknowledged. In the light of wide global variations in public health response infrastructure, population-specific vulnerabilities and the potentially unpredictable course of "pandemic influenza" itself (however defined), "severity" can be experienced very differently in different places and for different community segments at a given point in time.

At the international level, this variability introduces difficulties in yielding standardized severity-governed definitional criteria as the basis for pandemic influenza declaration. Geographic and virologic criteria thus remain more feasible and realistic definitional drivers, despite their admittedly inherent shortcomings from a risk perception standpoint. At the same time, however, severity indices do have considerable utility at national and subnational levels, where the above variations can and should factor directly into tailored, severity-based preparedness and response efforts for pandemic influenza.

In a broader sense, Doshi's assessment speaks powerfully to risk communication as among the greatest challenges in the international response to threats of global public health significance. In the context of pandemic influenza, explicitly establishing a consistent definition is a necessary first step that must be followed by aggressive pre-event education of the global community regarding that definition and its rationale. If we wait to ensure such clarity when the next influenza pandemic strikes, it will simply be too late. ■

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## Health is more than influenza

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The repeated pandemic health scares caused by an avian H5N1 and a new A(H1N1) human influenza virus are part of the culture of fear.[1–3] Worst-case thinking replaced balanced risk assessment. Worst-case thinking is motivated by the belief that the danger we face is so overwhelmingly catastrophic that we must act immediately. Rather than wait for information, we need a pre-emptive strike. But if resources buy lives, wasting resources wastes lives. The precautionary stocking of largely useless antivirals and the irrational vaccination policies against an unusually benign H1N1 virus wasted many billions of euros and eroded the trust of the public in health officials.[4–6] The pandemic policy was never informed by evidence, but by fear of worst-case scenarios.

In both pandemics of fear, the exaggerated claims of a severe public health threat stemmed primarily from disease advocacy by influenza experts. In the highly competitive market of health governance, the struggle for attention, bud-

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