## **Influenza in the 21st century: a call for papers**

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Influenza, in its zoonotic, seasonal epidemic and pandemic forms, remains a substantial global public health threat. The continuous circulation and re-assortment of influenza viruses in nature represents an ever-present public health threat to both animals and people. The highly pathogenic avian influenza (H5N1) virus has exacted a heavy toll on poultry farming and the national economies of affected countries since its initial emergence in 1997 and subsequent geographical spread. Although human infections with this avian virus are rare, such infections are severe and death has occurred in 60% of all documented cases.1 Concern about the pandemic potential of H5N1 spearheaded a renewed focus on pandemic planning and response worldwide. This virus remains a potential pandemic threat.

Human infection with influenza can vary from asymptomatic infection and acute self-limiting upper respiratory tract disease to serious complicated illness that may include exacerbation of other underlying conditions and severe viral pneumonia. The very young, the elderly and persons with chronic medical conditions typically face the highest risks of death and serious complications from annual seasonal influenza.<sup>2</sup> Seasonal influenza epidemics can affect up to 15% of the population and result in up to 500 000 deaths worldwide each year. Influenza pandemics can have an even bigger impact in the wider population, including younger age groups, because of a lack of population immunity to the new strain.<sup>3,4</sup> Influenza is, however, both a vaccine-preventable and treatable disease. Opportunities remain for the improvement of both vaccines and treatments, and for ensuring wider equitable and affordable access to these interventions, so that the morbidity and mortality from seasonal, zoonotic and pandemic influenza can be reduced.

In many under-resourced countries, the magnitude and scope of the influenza burden are poorly understood. Prevention and control measures are ceded a low priority due to competing public health priorities. Furthermore, the 2009 influenza pandemic has left some uncertainty and controversy over the public health impact of influenza. The historical legacy of the severe 1918 pandemic, and the very high case-fatality

rate of human infections with avian (H5N1) influenza, contrast with the milder pandemics of 1968 and 2009.

The global response to the 2009 pandemic has provided a substantial amount of new experience and evidence in public health responses to influenza, its treatment and prevention. The World Health Assembly (through the International Health Regulations Review Committee) has reviewed the global response to the pandemic, as have some national governments. At a meeting of Member States and World Health Organization (WHO) regional offices in October 2010,8 participants discussed the need to publish evaluations of the measures implemented during the 2009 pandemic. They asked WHO to support the publication of evidence-based experiences, especially in the light of the proposed revision of the pandemic preparedness and response guidance, while simultaneously using the global interest in the pandemic to strengthen approaches to seasonal and zoonotic influenza threats.

To build on this, and to capture a range of experiences in influenza, the *Bulletin* plans to publish a special theme issue on *Influenza in the 21st century*. This issue will address the public health importance of influenza, including lessons and experiences from the past few years, as well as an agenda for future action and research. One of the key aims of this theme issue will be to strengthen the discussion on public health policy and outcomes to complement the more detailed scientific reports published in many scientific and medical journals and to provide a stronger evidence base for policy and planning decisions.

We welcome papers for all sections of the *Bulletin* and encourage authors to consider contributions that address any of the following topics: disease burden assessments in low-income countries, since information in this area is scarce; vaccination implementation and policy, particularly on the cost and public health benefit of vaccination programmes; and the evaluation of non-pharmaceutical public health measures since these are widely described as control measures, but there is less published evidence on their effectiveness than for pharmaceutical interventions (vaccines and medicines).

In particular, we seek submission of papers that document experiences from low-resource settings. The deadline for submissions is 20 October 2011. Manuscripts should respect the Guidelines for contributors and mention this call for papers in a covering letter. All submissions will go through the *Bulletin*'s peer review process. Please submit to: http://submit.bwho.org

## References

- Cumulative number of confirmed human cases of avian influenza A/ (H5N1) reported to WHO (16 March 2011). Available from: http://www. who.int/csr/disease/avian\_influenza/country/ cases\_table\_2011\_03\_16/en/index.html [accessed 17 March 2011].
- Influenza vaccines: WHO position paper. Wkly Epidemiol Rec 2005;33:279. Available from: http://www.who.int/immunization/ wer8033influenza\_August2005\_position\_ paper.pdf [accessed 17 March 2011].
- Morens DM, Taubenberger JK, Harvey HA, Memoli MJ. The 1918 influenza pandemic: lessons for 2009 and the future. *Crit Care Med* 2010;38(Suppl):e10–20. doi:10.1097/ CCM.0b013e3181ceb25b PMID:20048675
- Bautista E, Chotpitayasunondh T, Gao Z, Harper SA, Shaw M, Uyeki TM et al. Clinical aspects of pandemic 2009 influenza A (H1N1) virus infection. N Engl J Med 2010;362:1708–19. doi:10.1056/NEJMra1000449 PMID:20445182
- Report of the 1st Africa Flu Alliance Meeting. Geneva: World Health Organization;2010. Available from: http://www.who.int/csr/disease/influenza/2010\_06\_3\_afa\_mtg\_marrakesh\_morocco.pdf, [accessed 17 March 2011].
- Report of the Review Committee on the functioning of the International Health Regulations (2005) and on pandemic influenza A (H1N1) 2009 (Preview). Geneva: World Health Organization; 2011. Available from: http://www. who.int/ihr/preview\_report\_review\_committee\_ mar2011\_en.pdf [accessed 17 March 2011].
- Hine D. The 2009 influenza pandemic: an independent review of the UK response to the 2009 influenza pandemic. London:
  Government of the United Kingdom of Great Britain and Northern Ireland; 2010.
  Available from: http://www.dhsspsni.gov.uk/the2009influenzapandemic\_acc.pdf [accessed 17 March 2011].
- Workshop on community public health measures implemented during the influenza A(H1N1) 2009 pandemic, Tunisia, 26-28 October 2010. Available from: http://www. who.int/mediacentre/events/meetings/2010/ influenza\_workshop/en/index.html [accessed 17 March 2011].

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