Science into policy: preparing for pandemic influenza

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ABSTRACT

Authoritative government pandemic preparedness requires an evidence-based approach. The scientific advisory process that has informed the current UK pandemic preparedness plans is described. The final endorsed scientific papers are now publicly available.

Keywords influenza, scientific advice, scientific evidence, pandemic, policy

Public expectations of effective government interventions in health crises are high in developed countries. Authoritative action and provision of information to the public can help in avoiding public disquiet or panic and in mitigating the societal risks of a pandemic, complementing the direct health effects of any interventions. Conversely, disagreement over the scientific evidence base, particularly where considerable uncertainties and gaps in information exist, can open the way to debate based primarily on established beliefs and prejudices.

In the face of a future event such as an influenza pandemic, the timing and precise nature of which is unknown, robust preparation will be strengthened by an agreed scientific understanding of the risks and the options for response.

The UK Government has followed an extensive process to review and confirm an agreed summary of the international evidence base. This underpins policy development on countermeasures within its pandemic influenza preparedness programme and can be of use to other countries developing pandemic preparedness plans as well.

Under the auspices of the UK Scientific Advisory Group on Pandemic Influenza, five scientific papers dealing with the main clinical countermeasures (antivirals, pre-pandemic and pandemic specific vaccines, antibiotics and facemasks) and the risk of a pandemic originating from an H5N1 virus were developed. These papers were reviewed and revised by additional national and international expert scientific reviewers and subsequently at a colloquium, convened by the Secretary of State for Health, of scientific experts. Revised papers were then submitted to the Scientific Advisory Group for final endorsement as reflecting an accurate and comprehensive summary of the state of knowledge in June 2007. The final endorsed papers have now been made publicly available as a resource to all.1

Papers reviewing the scientific evidence base in the following areas are available at: http://www.advisorybodies.doh.gov.uk/spi/evidence.htm

(i) The use of antiviral drugs in a pandemic;
(ii) pre-pandemic and pandemic specific influenza vaccines;
(iii) the use of antibiotics for pandemic influenza;
(iv) the use of face masks during a pandemic; and
(v) the risk of a pandemic originating from H5N1.

This widely agreed scientific state of the art offers a firm foundation for complex and potentially expensive policy and procurement decisions on pandemic countermeasures. Within the UK, the papers have already informed the recently
published framework\textsuperscript{2} and policy statement.\textsuperscript{3} They will continue to inform policy decisions across Government.

The scientific knowledge in this field is continually evolving and improving, and the UK will therefore continue to review and refine its assessment of the evidence base.

References

