

Fédération Internationale de l'Industrie du Médicament Federación Internacional de la Industria del Medicamento



IFPMA Statement

Improving Responses to Future Influenza Pandemics

Lessons from the 2009-10 H1N1 Pandemic

The 2009-10 H1N1 influenza pandemic prompted the most robust and complete pandemic response ever. As with any major public health initiative of this scale, it is important that stakeholders undertake a careful analysis of the response. This will help enhance future preparedness, by building on those areas that were successful, and improving those that were less

From the perspective of the vaccine manufacturers, several elements of the response were particularly effective:

High level of preparedness. For many years prior to the H1N1 outbreak, public health authorities, regulatory agencies and vaccine producers worked together on pandemic preparedness. These efforts intensified following the spread of H5N1 'avian' influenza. The resulting level of preparedness allowed authorities to respond robustly to the H1N1 pandemic, in a manner that was not previously possible.

Global co-operation and flexibility. The rapid development and testing of H1N1 vaccines presented many technical challenges, particularly in the initial stages. WHO network and industry scientists worked together, to share technical information and resolve urgent key issues, such as improving vaccine virus production yields and vaccine standardization. Industry interaction with the WHO regarding the H1N1 pandemic was focused on the development of H1N1 pandemic vaccines and on improving vaccine availability, and did not extend to pandemic alert status decision-making.

Robust vaccine monitoring. By implementing existing surveillance plans and sharing data publicly, authorities were able to confirm rapidly the safety of H1N1 vaccines.

Improvements to several areas of the pandemic response could strengthen future preparedness.

Technical improvements. Production yields from initial H1N1 vaccine viruses were 1/3 to 1/2 of those achieved with seasonal strains. Therefore, processes to rapidly evaluate multiple candidate vaccine strains and to select those with the best growth potential could improve yields and increase vaccine supply. Similarly, processes to speed up reagent production and broadening the range of techniques available for vaccine standardization would accelerate vaccine availability.

Establishing advance supply agreements. Large numbers of countries initiated negotiations for vaccine supply after the emergence of H1N1 influenza. Establishing advance supply agreements beforehand could avoid the need for complex discussions under intense time pressure during a pandemic.

Enhancing regulatory processes. International co-operation, mutual recognition of existing regulatory approvals and reduction of bureaucracy could all accelerate vaccine availability, while maintaining robust safety standards.

Strengthening public communications. Throughout the pandemic, vaccination rates have remained low even in target risk groups (for instance, coverage among healthcare workers reached just 37.1% in the USA by mid-January 2010¹ while a study of healthcare workers in Greece showed an acceptance rate of only 17% for pandemic vaccination²). In some instances, views propagated by social media may have eroded public confidence in the safety of H1N1 vaccines. Authorities need to recognize the importance of new communication channels to motivate the public to seek vaccination. It is important to emphasize the public health value and safety of vaccination, as well as the comprehensive system that is in place to evaluate and monitor vaccine safety.

Geneva, 24 June 2010

¹ US Centers for Disease Control and Prevention. MMWR April 2, 2010;59(12):357-362. (http://www.cdc.gov/mmwr/pdf/wk/mm5912.pdf).

² Rachiotis G, Mouchtouri VA, Kremastinou J, Gourgoulianis K, Hadjichristodoulou C. Low acceptance of vaccination against the 2009 pandemic influenza A(H1N1) among healthcare workers in Greece. Euro Surveill. 2010;15(6): pii=19486. Available online: (http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19486)