H1N1/09 Pandemic News Notes

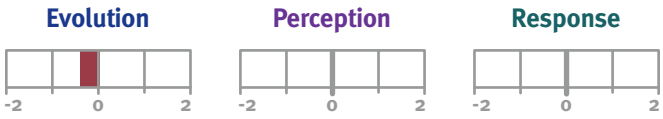
bio-era

Monday, July 13, 2009

Study Suggests H1N1/09 More Virulent Than Thought

A study conducted by international researchers and led by virologist Yoshihiro Kawaoka from the University of Wisconsin-Madison reports that the H1N1/09 flu is not as similar to the seasonal flu as many have perceived. According to the study, which was conducted using mice, ferrets, and non-human primates, the H1N1/09 virus is more virulent than most people think and has the ability to infect people deep within their lungs. According to Kawaoka, "People think this pathogen may be similar to seasonal influenza. This study shows that is not the case. There is clear evidence that the virus is different than seasonal influenza."[1]

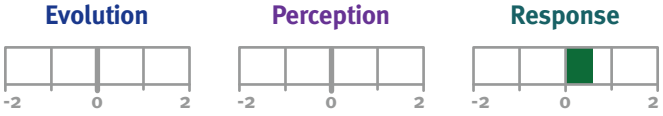
The study says the H1N1/09 virus's ability to infect deep within lungs is similar to the 1918 pandemic virus and also found that people old enough to have been exposed to the 1918 virus have antibodies effective at neutralizing the H1N1/09 virus. The study reinforced some good news, showing that the existing antivirals in use throughout the world to treat the virus can be an effective first-line defense against H1N1/09.[2]



WHO Recommends Vaccine Strategies

Today, the WHO and its Strategic Advisory Group of Experts on Immunization (SAGE) announced recommendations that they have developed for countries to follow once H1N1/09 vaccinations become available. SAGE composed four recommendations that were endorsed by the WHO's Director General on July 11. The first recommendation is that countries make health care workers first priorities in vaccination distributions. After health care workers, priorities for the remaining groups should be determined as country-specific conditions warrant, with the following order suggested as a basis: "pregnant women; those aged above 6 months with one of several chronic medical conditions; healthy young adults of 15 to 49 years of age; healthy children; healthy adults of 50 to 64 years of age; and healthy adults of 65 years of age and above."[3]

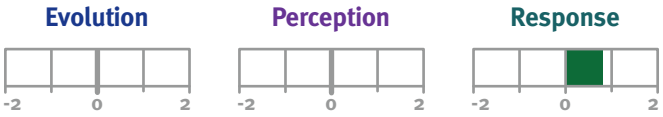
The second recommendation urges the need for very extensive and detailed post-marketing surveillance of the new H1N1/09 vaccines. This recommendation surrounds the concern that not all of the new productions processes have been thoroughly evaluated for how safe they are in all populations. Its third recommendation urges countries to promote production processes that use an oil-in-water adjuvant and live flu virus for vaccines because of the anticipated limited availability and possible "drifted" strains of virus. The final recommendation was that there is no need to urge companies to switch flu productions from the seasonal to pandemic vaccines because productions for seasonal vaccines are nearly complete. SAGE also said that because the virus has been labeled "unstoppable," every country will need vaccine supplies.[4]



US Government Preparing for H1N1/09 in the Fall

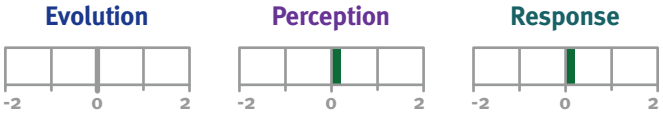
The U.S. government has announced that it will spend another $1 billion to purchase additional ingredients needed for production of an H1N1/09 flu vaccine. The government already committed $1 billion dollars to buy vaccines when they become available, and this announcement shows that they are taking very proactive steps in making sure the country is prepared for more outbreaks of the virus when flu season begins this fall.[5]

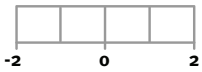
On Friday July 10, the U.S. Department of Health and Human Services (HHS) announced that there will be $350 million in grants made available for U.S. states and territories to help them prepare for the H1N1/09 virus this fall. The $350 million is composed of $260 million in Public Health Emergency Response grants and $90 million in Hospital Preparedness grants. The funds are provided by a supplemental appropriations bill that President Obama recently signed into law.[6]



Singapore Continues Shift into Mitigation Phase

Singapore took another step in its pandemic response phase today, announcing that it will discontinue thermal screening of people entering the country. Singapore has confirmed a large number of localized transmissions. The announcement comes as the country continues its shift into a mitigation response phase.[7] Many countries in the Western Pacific, including Australia, Malaysia, China, and the Philippines, have all shifted to mitigation type phases.





Bio-era's judgement regarding the extent to which a development is positive or negative for: (1) the physical evolution of the disease, (2) perceptions of the disease, and (3) future disease event impacts.

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Physical Evolution How significant is the development with respect to the evolution, transmissability, and virulence of the disease?	Indicates or portends higher transmission, transmissability, and/or virulence of the disease	No Net Change	Indicates or portends lower transmission, transmissability, and/or virulence of the disease
Perception How significant is the development with respect to perceptions of threat (i.e., fears of the disease)?	Indicates or promotes heightened fear of the disease	No Net Effect	Indicates or promotes lower fear of the disease
Response/Reaction To what degree does the response help or hinder the effort to mitigate the impacts the disease?	Expected to exacerbate disease impacts	No Net Impact	Expected to mitigate disease impacts

1 WISBUSINESS. "UW-Madison: Study suggests H1N1 virus more dangerous than suspected." July 13, 2009. See: http://www.wisbusiness.com/index.iml?Article=164263
2 WISBUSINESS. See [i]
3 WHO. "WHO recommendations on pandemic (H1N1) 2009 vaccines." July 13, 2009. See: http://www.who.int/csr/disease/swineflu/notes/h1n1_vaccine_20090713/en/index.html
4 WHO. See [iii]
5 Reuters. "U.S. to spend another $1 billion on flu vaccine." July 12, 2009. See: http://www.reuters.com/article/scienceNews/idUSTRE56669020090712
6 HHS.gov. "States Eligible to Receive $350 Million for H1N1, Seasonal Flu Preparedness Efforts." July 10, 2009. See: http://sharing.govdelivery.com/bulletins/GD/USHHS-7F4EB
7 WHO. "Singapore ends temperature screening at borders for Pandemic H1N1." July 13, 2009. See: http://www.reliefweb.int/rw/rwb.nsf/db900SID/NSPR-7TWHPK?OpenDocument