

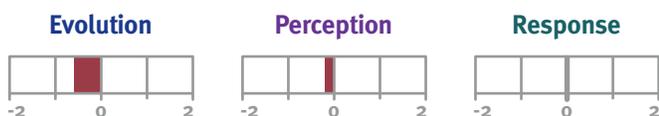
Monday, June 29, 2009

H1N1 TREND UPDATE

Today, the African nations of Kenya and Mauritius confirmed their first cases of the H1N1 virus. Kenya confirmed its first case in a British student who arrived with a group of 34 other students to conduct field studies in Kisumu. Kenyan officials have quarantined the entire group and the Public Health Minister quickly released a statement reassuring there is no cause for panic over the country's first confirmed case.¹ Mauritius confirmed its first case of the virus in a tourist that recently arrived from Argentina.² Nepal also confirmed its first three cases of the H1N1 virus in a family that recently returned from living in the U.S.³

After confirming its first H1N1 case June 18th, South Africa confirmed two more cases of the virus in citizens returning from the U.S. and London.⁴ Saturday, Kuwait confirmed three additional cases of the H1N1 virus in three citizens who recently returned from being abroad.⁵ Pretoria also confirmed three more cases of the virus in travelers who recently came from the U.S. and London, bringing the country's total to seven confirmed cases.⁶

The H1N1 virus continues to spread to less affected countries through passengers traveling from highly infected countries. Bio-era began monitoring this trend two weeks ago and will continue to monitor perceptions and reactions linked it.



DIFFERENT PREVENTATIVE MEASURES FOR H1N1

Today Switzerland announced that it will be changing some of its travel laws for transportation companies in order to adapt to the spread of the H1N1 virus. Effective July 1, all transportation companies entering the country with passengers will be required to take five new measures which include: providing passenger lists upon the government's request, handing out information sheets if there is a change in the pandemic situation, asking passengers to fill out contact forms and health declarations, and finally facilitating medical examinations if needed.⁷ Switzerland has confirmed 33 cases of the virus and no deaths.⁸

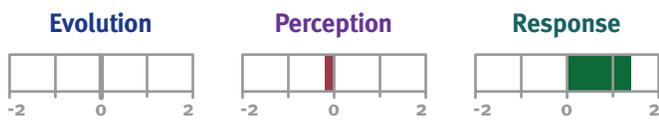
The Indonesian Health Ministry is taking additional preventative measures by distributing masks to passengers arriving from heavily H1N1 infected countries and asking that passengers wear them for three days. Wearing the masks will be urged, but not mandatory because of the negative affects it could have on the country's tourism. Since confirming its first two cases last week, Indonesia has confirmed eight total cases, four of which have been in people coming from abroad.⁹

State officials in Malaysia are urging students studying abroad, particularly in Australia, to stay abroad until the spread of the H1N1 virus has settled. The Deputy Chief Minister stated, "Those studying overseas, especially in high-risk countries, including Australia, are advised not to come back until everything is over." The announcement followed the confirmation of four new cases in students

This document has been prepared by bio-era as a part of the "Thinking Ahead" service, designed to support commercial decision-making in response to the anticipated commercial and economic impacts of novel H1N1 pandemic influenza. The service seeks to monitor and evaluate current developments based on their significance with respect to three criteria: the significance of the news item for (1) the evolution of the physical disease event; (2) its effects on perceptions of threat (i.e., fear); and (3) examples of reaction or response to (1) and (2) above. To the extent possible, bio-era seeks to integrate an understanding of the particular news items identified as leading indicators or signposts within a broader bio-era scenario-based decision-support framework. To learn more about the service, the scenarios framework, or to enroll, please visit www.bio-era.net.

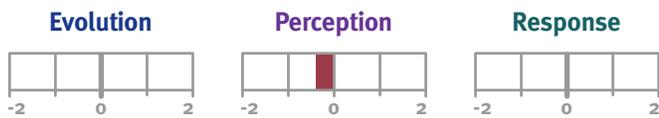
returning from abroad.¹⁰ Malaysia has confirmed 144 total cases of the virus and reported no related deaths.¹¹

Friday, following the confirmations of the H1N1 virus in three new African countries, the Eritrea Ministry of Health announced that they have put the necessary measures in place at major ports of entry to conduct blood test on all incoming travelers from heavily H1N1 infected countries.¹²



ABSENTEEISM UP 66% IN UNITED KINGDOM

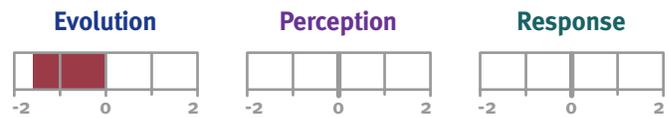
FirstCare, a European absence management company, is reporting that absenteeism in U.K. workers due to flu like symptoms is up 66% over the same time period as last year. Their figures show that 1 in every 400 workers called in sick for flu like illnesses the last week of June. FirstCare's CEO linked the increased rate directly to the H1N1 virus, and is calling on companies to prepare plans for greater increases in autumn.¹³



TAMIFLU RESISTANCE

Scientists in Denmark are reporting the first case of H1N1 resistance to Tamiflu. The patient was given Tamiflu for preventative treatment after coming in close contact with a confirmed case of the virus, and later developed flu like symptoms. After being tested, doctors found the patient was carrying a virus mutation that had developed resistance to the Tamiflu drug. The head of Roche Holdings, which manufactures Tamiflu, stated that these findings do

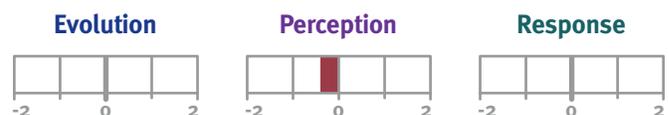
not mean the virus has acquired new resistant characteristics. It was in only one patient receiving the treatment for precautionary measures and he stated that this is known as a drug induced resistance.¹⁴



H1N1 VACCINE MAY OVERWHELM HEALTH SYSTEMS

At a CDC meeting on Friday, health officials voiced concern that administering H1N1 immunizations this fall may overwhelm state health agencies. The U.S. government purchased all the vaccines expected to be available by October 15, and it has yet to be determined what role state agencies will play in the distribution of the vaccines. The vaccine will require people to get two injections three weeks apart, while children under nine will require four injections. The necessity to receive multiple shots, in addition to other regular vaccines, is what has health officials worried about public health agencies capacities to handle the distributions.

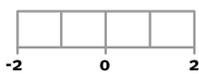
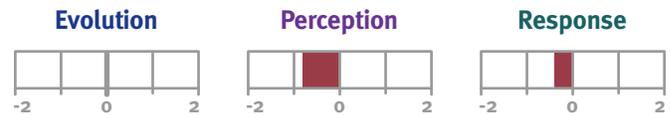
William Schaffner of the Vanderbilt University School of Medicine showed his concern at a recent flu conference saying, "Public health departments are under-funded and will get fatigued." The CDC's head of routine vaccination distribution activities said they hope the government will allow states to decide which means of distribution work best so, "There may be some states that lean toward the public sites and others that lean more toward the private."¹⁵ The immunization campaign could potentially involve 600 million doses of H1N1 vaccine, far greater than the 115 million seasonal flu vaccines distributed annually.¹⁶



H1N1 AFFECTS VOTER TURNOUT IN ARGENTINA

Argentina’s National Electoral Board says that voting turnouts for mid-term elections were down 13% nationwide, compared to 2005. Officials are attributing the low turnout to the H1N1 virus, which has risen rapidly throughout the country over the past few weeks.¹⁷ Many Argentine citizens were wearing masks as they went out to stand in line and vote over the weekend.¹⁸

Also today, Argentina’s Health Minister resigned amid speculation that she was unhappy and battling opposition in the cabinet over her response measures to the H1N1 virus. Argentina has confirmed over 1,500 cases of the virus and 26 deaths.¹⁹



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.

	-2	0	2
<p>Physical Evolution</p> <p>How significant is the development with respect to the evolution, transmissability, and virulence of the disease?</p>	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
<p>Perception</p> <p>How significant is the development with respect to perceptions of threat (i.e., fears of the disease)?</p>	Indicates or promotes heightened fear of the disease	No Net Effect	Indicates or promotes lower fear of the disease
<p>Response/Reaction</p> <p>To what degree does the response help or hinder the effort to mitigate the impacts the disease?</p>	Expected to exacerbate disease impacts	No Net Impact	Expected to mitigate disease impacts

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- 3 Reuters. "Nepal Confirms First H1N1 Flu Cases." June 29, 2009. See: <http://www.alertnet.org/thenews/newsdesk/DEL194248.htm>
- 4 *News 24*. "More Cases of H1N1 Flu in SA." June 29, 2009. See: http://www.news24.com/Content/SouthAfrica/News/1059/15d9aaf2549549e986c58304dc83f9ee/More_cases_of_H1N1_flu_in_SA
- 5 *Kuwait Times*. "Three new swine flu cases confirmed in Kuwait." June 27, 2009. See: http://www.kuwaittimes.net/read_news.php?newsid=Mjk1OTU3OTk3
- 6 *BuaNews Online*. "Swine Flu Cases Increase to Seven." June 29, 2009. See: <http://www.buanews.gov.za/news/09/09062915551002>
- 7 *Geneva Lunch*. "Switzerland changes laws on medical questioning at borders: 1 July." June 29, 2009. See: <http://genevalunch.com/2009/06/29/switzerland-changes-laws-on-medical-questioning-at-borders-1-july/>
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- 9 *The Straights Times*. "Tourists Must Wear Masks." June 29, 2009. See: http://www.straitstimes.com/Breaking%2BNews/SE%2BAsia/Story/STIStory_396920.html
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- 11 WHO. "Influenza A(H1N1) - Update 55." June 29, 2009. See: http://www.who.int/csr/don/2009_06_29/en/index.html
- 12 *All Africa*. "Eritrea: Ministry Makes Due Preparations to Prevent Influx of Swine Flu H1N1." June 25, 2009. See: <http://allafrica.com/stories/200906251057.html>
- 13 *Nursing Times*. "Flu Related Absence up 66%..." June 29, 2009. See: <http://www.nursingtimes.net/whats-new-in-nursing/swine-flu/flu-related-absence-up-66-as-employers-are-warned-about-swine-flu-effect/5003350.article>
- 14 Bloomberg. "Roche Sees First Case of Tamiflu-Resistant Swine Flu." June 29, 2009. See: <http://www.bloomberg.com/apps/news?pid=20601085&sid=an3udfKwF4Do>
- 15 Bloomberg. "Swine Flu's Multi-Shot Vaccine May Overwhelm States." June 26, 2009. See: <http://www.bloomberg.com/apps/news?pid=20601124&sid=axzjhgp27HJ8>
- 16 AP. "Swine flu shot campaign could involve 600M doses." June 26, 2009. See: <http://www.forbes.com/feeds/ap/2009/06/26/ap6592744.html>
- 17 *Buenos Aires Herald*. "Low Attendance in Today's Elections." June 28, 2009. See: <http://www.buenosairesherald.com/BreakingNews/View/5069>
- 18 *The Australian*. "Argentine President Kirchner dealt election blow." June 29, 2009. See: <http://www.theaustralian.news.com.au/story/0,25197,25705951-2703,00.html>
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