

Scenario – VCEE2

Information on reindeer flu

What is believed to be a new strain of the swine flu virus has recently appeared in North Carolina. Scientists are still working on an analysis of the virus, but it appears to have caused a number of deaths already. The case fatality rate for the 2009 swine flu is estimated to be around one in 4000 (0.026%). The case fatality rate for the new strain may be in the region of 0.25-1%, although the relatively small number of cases does not allow for an accurate extrapolation yet. The symptoms are similar to swine flu: fever, sore throat, cough, headache, muscle or joint pains, and nausea, vomiting, or diarrhea. However, while these symptoms typically abate after 4-6 days in the case swine flu, persons infected with the new strain tend to experience a sudden increase in severity of these symptoms after 2-3 days, particularly fever, vomiting and diarrhea. This results in severe dehydration. For the first 2-3 days, there do not appear to be any distinguishing flu symptoms. None of the fatalities from the new strain were vaccinated against swine flu, nor were they taking antiviral drugs.

Emerging Events

There are currently two major events scheduled for late-March to take place in Hampton Roads, Virginia, USA. The International Computer Games Conference and Exhibition, for which around 6,000 delegates and visitors from all around the world are expected, commences March 29. Given the subject of the event, there are likely to be a lot of young people amongst the delegates. The second major event is the launch ceremony for a new hospital ship, for which high-ranking military personnel and government officials are expected, including a delegation from Canada who are considering commissioning a similar ship for their Navy, is scheduled for March 31.

Roles

The Virginia Emergency Operations Center (VEOC) is currently staffing its 17 Emergency Support Functions (ESFs) for 2010. The ESFs are:

ESF 1: Transportation	ESF 10: Oil and Hazardous Materials Response
ESF 2: Communications	ESF 11: Agriculture and Natural Resources
ESF 3: Public Works and Engineering	ESF 12: Energy
ESF 4: Firefighting	ESF 13: Public Safety and Security
ESF 5: Emergency Management	ESF 14: Long Term Community Recovery
ESF 6: Mass Care, Housing and Human Services	ESF 15: External Affairs
ESF 7: Resource Management	ESF 16: Military Support
ESF 8: Health and Medical Services	ESF 17: Volunteer and Donations Management
ESF 9: Search and Rescue	ESF 18: International Relations

Your Team's Task

The VEOC has been tasked to provide an influenza response plan for reindeer flu. Your team will integrate with the VEOC. Once prepared, the plan will be enacted to mitigate the potential consequences to the upcoming international events.

By the close of VCEE-2, your team should provide an influenza response plan for reindeer flu, specifically addressing the international events.

Swine Flu (2009)

The 2009 flu pandemic is a global outbreak of a new strain of H1N1 influenza virus, often referred to as "swine flu" in the media. The initial outbreak was called the "H1N1 influenza". It is officially called pandemic H1N1/09 virus by the WHO, while the CDC refers to it as "novel influenza A (H1N1)" or "2009 H1N1 flu".

The outbreak began in Veracruz, Mexico, with evidence that there had been an ongoing epidemic for months before it was officially recognized as such. The Mexican government closed most of Mexico City's public and private facilities in an attempt to contain the spread of the virus. However the virus continued to spread globally, clinics were overwhelmed by people infected, and the World Health Organization (WHO) and US Centers for Disease Control (CDC) stopped counting cases and in June declared the outbreak to be a pandemic.

While only mild symptoms are experienced by the majority of people, some have more severe symptoms. Mild symptoms may include fever, sore throat, cough, headache, muscle or joint pains, and nausea, vomiting, or diarrhea. Those at risk of a more severe infection include: asthmatics, diabetics, those with obesity, heart disease, the immunocompromised, children with neurodevelopmental conditions, and pregnant women.

In addition, even for persons previously very healthy, a small percentage of patients will develop viral pneumonia. This manifests itself as increased breathing difficulty and typically occurs 3–6 days after initial onset of flu symptoms.

Similar to other influenza viruses, pandemic H1N1 is typically contracted by person to person transmission through respiratory droplets. Symptoms usually last 4–6 days. To avoid spreading the infection, it is recommended that those with symptoms stay home, away from school, work, and crowded places. Those with more severe symptoms or those in an at-risk group may benefit from antivirals. As of December 4, 2009, there are 10,402 confirmed deaths worldwide. This figure is a sum of confirmed deaths reported by national authorities and the WHO states that total mortality (including deaths unconfirmed or unreported) from the new H1N1 strain is "unquestionably higher" than this.

The virus is a novel strain of influenza for which extant vaccines against seasonal flu provide little protection. A study at the US Centers for Disease Control and Prevention, published in May 2009, found that children had no preexisting immunity to the new strain but that adults, particularly those over 60, had some degree of immunity. Children showed no cross-reactive antibody reaction to the new strain, adults aged 18 to 64 had 6–9%, and older adults 33%. It was also determined that the strain contained genes from five different flu viruses: North American swine influenza, North American avian influenza, human influenza, and two swine influenza viruses typically found in Asia and Europe. Further analysis showed that several proteins of the virus are most similar to strains that cause mild symptoms in humans, leading virologist Wendy

Barclay to suggest on May 1, 2009 that the initial indications are that the virus was unlikely to cause severe symptoms for most people.

In July 2009, the CDC noted that most infections were mild, similar to seasonal flu, recovery tended to be fairly quick, and deaths to date had been only a fraction of the number of people who die every year from seasonal flu. The 1918 flu epidemic began with a wave of mild cases in the spring, followed by more deadly waves in the autumn, eventually killing hundreds of thousands in the United States. Researchers from the University of Maryland mixed swine flu and seasonal flu and concluded that the swine flu was unlikely to get more lethal.