

Discussion

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The Pandemic Threat of Avian Influenza A (H7N9) Virus

The Pandemic Threat of Avian Influenza A (H7N9) Virus Background into the Virus

According to the CDC (2014), cases of human infections with the new avian influenza A (H7N9) virus were originally described by the World Health Organization (WHO) as having occurred in China in March 2013. In its report on the virus, the WHO cited that it believed that the 132 human H7N9 infections that resulted in 44 casualties had been caused from exposure to infected poultry or contaminated environments. On February 12, 2014, Malaysia reported the first case of the avian influenza A (H7N9) infection to be recorded outside China. The infection was detected in a traveler who had chanced to travel from an H7N9-affected area of China. The CDC (2014) affirms that no cases of the new H7N9 virus have been detected in people and birds within the United States.

Pandemic Effect of the Avian A (H7N9) Influenza Virus

A number of avian influenza viruses have been able to cross the species barrier on a few occasions with the effect of having a varying impact on human health. Kreijtz et al, (2013), point out that the majority of the humans infected with avian virus have presented with severe viral pneumonia before they eventually became critically ill. These symptoms are supported by findings by the CDC (2014) which reports that while some relatively mild cases of human H7N9 infection have been reported with most of these patients being diagnosed as having severe respiratory illnesses, an alarming one-third of infections result in death. The pandemic potential of the H7N9 virus is evidenced by the fact that the estimated mortality rate of one-third of infected patients provided by the CDC (2014) is found to be similar to the

results of an epidemiologic study that was conducted on 82 confirmed cases of persons infected with the H7N9 virus in china by Li et al. (2013). In the study, it was found that the mortality rate for the disease was at about 21%, however, Li et al, (2013), highlighted the fact that this percentage was quite likely to increase as most of the patients in the study who were confirmed as having the H7N9 virus infection remained critically ill.

Attempts to try and control the spread of the avian A (H7N9) virus by the controlled culling of birds in affected areas might not be particularly successful as is shown by the results of a study conducted by Olson et al, (2013). In the study, the researchers established that controlling human infection with the H7N9 avian influenza subtype by the culling of birds might prove to be quite challenging as a result of the probability that some of the infected domestic flocks might be asymptomatic. Olson et al, (2013), also notes that in wild bird populations, low pathogenicity strains of the virus were found to be more likely to be sustained for longer periods as compared to highly pathogenic strains which the research found to be unable to persist in wild populations in the absence of introductions from the domestic reservoirs.

Avian Influenza A (H7N9), Public Health Planning and Prevention Measures
In the United States, the CDC has laid in place a number of measures that will help to protect the country's citizens from the threat posed by the H7N9 virus. The United States government actively supports the international surveillance of H7N9 and all the other viruses that have a pandemic potential. As part of its prevention measure, the CDC is attempting to develop a candidate vaccine virus to help in making a vaccine for the virus in

the event that this vaccine is ever needed. In addition to this, it has also issued a number of guidance measures to public health authorities across the United States. The United States government also endeavors to provide information for people travelling to China (CDC 2014).

Conclusion

Despite the fact that data from a number of research has shown that the spread of the avian influenza A (H7N9) virus cannot be easily spread by human to human contact, the spread of the virus from birds to humans is quite concerning. The CDC (2014), postulates that the spread of the virus will probably continue and it is quite possible for it to spread from China to some of its neighboring countries. The most concerning aspect of the spread of this virus is its pandemic potential. Influenza viruses constantly change and it is quite probable that this virus will eventually gain the ability of being able to easily and quickly spread among huge populations in a trend that will trigger a global outbreak of the disease (pandemic).

Works Cited

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