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Lung alert

Clinical characteristics of the H1N1 virus

Prior to 2005, human infections with classic swine influenza viruses were reported at a rate of only one or two cases per year. However, by the late 1990s multiple strains and subtypes (H1N1, H3N2 and H1N2) of triple-reassortant swine influenza A (H1) viruses containing genes from avian, human and swine influenza viruses had emerged and became enzootic among pig herds in North America.

In the first study, 11 sporadic cases of human infections with triple-reassortant swine influenza A (H1) occurring between December 2005 through February 2009 are described using information collected by the Centre for Disease Control in the USA. All but one of the cases definitely had exposure to pigs. Four patients had underlying medical conditions and the median age of the 11 infected was only 10 years. Symptoms included fever, cough, headache, sore throat, diarrhoea and myalgia. All patients recovered.

In the second study, between 15 April and 5 May 2009, a further 642 confirmed cases of H1N1 are described from 41 states in the USA. In this paper the age range is much broader (3 moths to 81 years). However, the symptom profile is very similar and the spectrum of disease severity ranges from mild self-limiting illness to hospitalisation and death.

Both the studies provide a description of symptoms and outcomes of this evolving virus and emphasise the importance of communication and collaboration worldwide to better understand the disease. It is possible that H1N1 infection in humans presents the greatest pandemic threat since the emergence of influenza A (H3N2) virus in 1968. The continued identification of new cases worldwide indicates sustained human to human transmission with great epidemic and pandemic threat to global public health.

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