

## Avian and Swine Flu Infections in Human Need More Care in National and International Levels

### Dear Editor,

Avian influenza is a worldwide infectious disease of birds caused by type A strain of the influenza virus. Many bird species are susceptible to infection with avian influenza viruses without any signs and symptoms. The disease has been seen since mid 2003 and spread worldwide to human. Nearly 438 people were infected and about 262 patients died till August, 11, 2009. In addition, since 20<sup>th</sup> of September 2009, there have been more than 300,000 laboratory confirmed cases of pandemic influenza H1N1; 3917 deaths in 191 countries and territories reported by WHO. The number of cases of swine flu in the world continued to increase worldwide at least in 180 countries. However, cases of swine flu have fallen in many developed ones in all age groups, perhaps as the result of high levels of personal hygiene and application of public health measures in these countries. The disease may be controlled using appropriate health measures either personally or publically.

Many outbreaks of H5N1 avian influenza were seen in south-east Asia in mid-2003 and have now spread to a few parts of the Middle East and Europe.<sup>1</sup> WHO has released action plans for this pandemic situation.<sup>1</sup> The number of the patients has increased to 438 cases and nearly 262 patients have died till 11 August 2009. The disease has a high mortality rate (100%) within 48 hours if it remains untreated and a next pandemic may be on the way.<sup>1-3</sup> But no one knows when and where it has started. Therefore, serious precaution measures should be taken for preventing the infection in particular for First Aider, medical workers and volunteers who attend the infected areas in particular in disaster situations. As WHO has predicated the next pandemic of flu,<sup>4,5</sup> this precaution is highly critical. A few health measures include rapid culling of all infected or exposed birds, disposal of carcasses, the quarantining and disinfection of farms, implementation of strict sanitary, or "high biosafety level" measures. In addition, there should be restrictions on the movement of the living poultry, in particular between countries. Birds must be housed indoors in sanitary conditions, in large numbers.<sup>6</sup> Taking care in practice of slaughtering, butchering, and preparation of poultry meat for cooking, hand

washing, decontamination of shoes, boots, and dressing with chlorine or bleaching the protective equipment (i.e. Mask and Glass,) for medical workers taking caring of patients or veterinarians are necessary. Rapid detection of different subtypes and treatment of patients could be useful, too.<sup>7</sup> In addition, the number of cases of swine flu has increased in the world (Table 1). The number of cases in Iran has increased to 400 and 4 deaths till 20<sup>th</sup> of September 2009.<sup>8</sup> The diseases may be controlled if proper health measures are taken either both personally and publically.

**Table 1:** Laboratory-confirmed cases of pandemic (H1N1) 2009 as officially reported to WHO by States Parties to the IHR (2005) as of 20 September 2009

Region	Cumulative total as of 20 September 2009	
	Cases*	Deaths
WHO Regional Office for Africa (AFRO)	8264	41
WHO Regional Office for the Americas (AMRO)	130448	2948
WHO Regional Office for the Eastern Mediterranean (EMRO)	11621	72
WHO Regional Office for Europe (EURO)	At least 53000	Over 154
WHO Regional Office for South-East Asia (SEARO)	30293	340
WHO Regional Office for the Western Pacific (WPRO)	85299	362
Total	At least 318925	Over 3917

\*Given that countries are no longer required to test and report individual cases, the number of cases reported actually understates the real number of cases.

**Keywords:** Avian influenza; Birds; Human; Care; Risk; Swine

**Conflict of interest:** None declared.

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